

Triad International Airport Area Transportation Study

May, 2004

Piedmont Triad Airport Area Transportation Study

Prepared by:

Transportation Planning Branch Environment, Planning, and Local Governmental Affairs North Carolina Department of Transportation

In Cooperation with:

Piedmont Authority for Regional Transportation Greensboro Urban Area MPO High Point Urban Area MPO Winston Salem Area MPO Guilford County Planning Department Piedmont Triad International Airport Federal Highway Administration U.S. Department of Transportation

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Scott W. Walston, P.E. Transportation Planning Branch Project Engineer

Acknowledgments

Persons Responsible For This Report:

Project Engineer: Scott Walston, P.E.

Triad Unit Head: Jerry Dudeck, P.E.

Group Manager: Dan Thomas, P.E.

Manager Transportation Planning Branch: Mike Bruff, P.E.

Transportation Technician Jim Neely

(note: Scott Rhine of PART (Piedmont Authority For Regional Transportation) contributed most of the verbage and files used in Chapter 8, Pubic Involvement).



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Chapter 1 - INTRODUCTION

1.1 Purpose

The economic and social well being of the Triad Area (which includes the Cities of Greensboro, High Point, and Winston-Salem) depends upon the quality of the transportation facilities that exist in the area. If people are able to travel about freely in an area today and as the economy grows, then the transportation systems have been planned to properly accommodate existing and future travel. Well-planned transportation systems will allow for economic growth, while simultaneously providing safe and efficient travel throughout the Triad Area.

The North Carolina Department of Transportation, in coordination with the Piedmont Authority for Regional Transportation (PART), Greensboro Urban Area Metropolitan Planning Organization, High Point Urban Area Metropolitan Planning Organization, and the Winston-Salem Urban Area Metropolitan Planning Organization cooperatively developed the Piedmont Triad Airport Area Study.

The goals of this study are:

- determine future routing of I-73
- relocate Bryan Boulevard and provide immediate access to the airport terminal
- improve access from High Point to the airport
- improve access from Forsyth County to the airport
- provide public transportation access to the airport
- traffic relief for I-40

This study sets forth a transportation system in the area, that will eventually become an element of local area Thoroughfare Plans, and that will serve the anticipated traffic and land development needs for



Valuable information

Term Definition

More Information on Web

Document Reference

Acronyms

NCDOT – North Carolina Department of Transportation

MPO – Metropolitan Planning Organization

PART

PART is short for the Piedmont Authority For Regional Transportation. Their goal is to improve transportation through regional cooperation. Their current territory includes Alamance, Davidson, Forsyth, Guilford, Randolph, and Rockingham Counties. http://www.partnc.org

the area. Other goals of this study will be to improve safety, air quality, promote growth and improve overall efficiency of the transportation network. See Figure 1 for a vicinity map of the area.



This report is divided into six chapters:

CH 1 Introduction and Overview

CH 2 Recommended Transportation Improvements

This chapter describes the recommended alternative and includes purpose and need statements for most of the major transportation projects

CH 3 Analysis of Existing Roadway System

This chapter describes the recommended alternative and includes purpose and need statements for most of the major transportation projects.

CH 4 Factors Affecting the Future Roadway System

This chapter lists the project assumptions and land use

CH 5 Preliminary Alternatives

This chapter details the 12 alternatives studied and the reasoning why they were or were not carried into the final alternatives phase.

CH 6 Final Alternatives

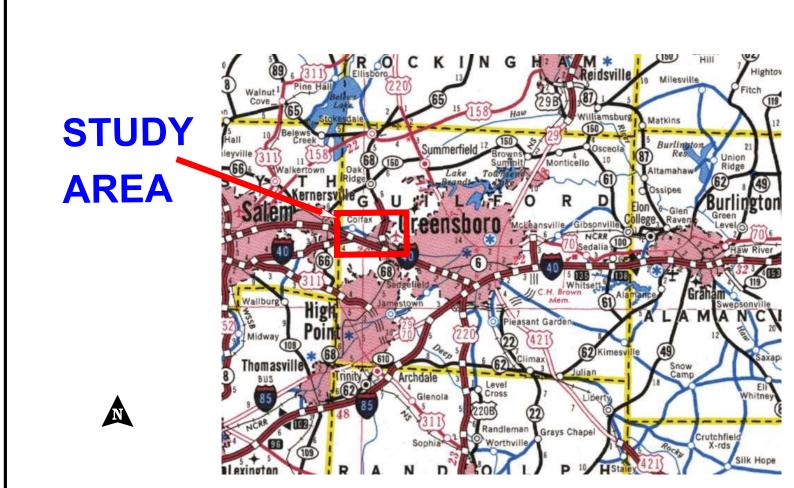
This chapter describes the four alternatives that were carried to the public for review.

CH 7 Environmental and Social Factors

This chapter describes the four alternatives that were carried to the public for review.

CH 8 Public Involvement

This chapter provides the public involvement process and the comments from the public.



Piedmont Triad Airport Transportation Study Location Map Figure 1 10/28/03



Back of Figure 1



Chapter 2 – RECOMMENDED TRANSPORTATION IMPROVEMENTS

2.1 Intent of the Airport Area Study

Transportation is the backbone of a region's economic vitality. Without an adequate transportation system people cannot easily reach their intended destination, goods cannot be delivered



to market in a cost effective manner, and investors may look to invest in better served areas. Recent trends such as regional economies, "just in time" delivery, increased automobile ownership, and increased migration away from the central cities and towns are taxing our existing transportation systems and requiring that we put more emphasis on planning for our transportation future.

The transportation study supports the need for new and improved transportation facilities. The plan is intended to provide the area with the necessary roadway improvements to satisfy the anticipated transportation needs until the year 2025. Bicycle and pedestrian modes of transportation were not considered in the development of this study – the primary focus was on vehicular travel and trucks.

This plan identifies future transportation plan corridors, that were eventually adopted as an element of the Greensboro Thoroughfare Plan on May 28, 2003. In the past, a future airport connector was identified on the Winston-Salem Thoroughfare Plan and 2025 Long-Range Transportation Plan. The connector, however, ended at the Forsyth/Guilford County line.

The goals of this study (as reflected in the PART minutes dated August 2, 2000) are outlined in Chapter 1.

The traffic forecasts for the Piedmont Triad Airport Study were developed based upon the Triad travel demand model, which is based on population, employment, and travel trends in the area, as well as the area's anticipated growth. Future land use was developed and adopted by the local area for the future year (2025) scenarios. It is important to

Travel Demand Model

The Travel Demand Model for the Triad is a replication of the travel patterns of the triad area. The projections to the future year (2025) are based on local growth projections. The model was used in estimating future traffic on the alternatives for this study.

realize that the plan is not a rigid set of proposals, but is intended to be flexible enough to account for changes in future growth. Since it is part of a mutually adopted Thoroughfare Plan, these proposals should be reviewed regularly in order



to re-evaluate the conditions in the area and to eliminate any possible adverse impacts of unnecessary transportation improvements. Also, the area may at any time request a re-evaluation of this plan if conditions are expected to change from those anticipated.

This chapter presents the Airport Study recommendations based on the ability of the existing transportation systems to serve present and future desires as the Piedmont Triad area continues to grow. It is the goal of this study to develop a transportation system that will serve the anticipated traffic and land development needs for the Piedmont Triad Airport area. Other goals will be to improve safety, improve air quality, promote growth and improve overall efficiency of the transportation network.

2.2 Highlights

Major highlights of the Piedmont Triad Area Airport Study are outlined below. The following projects are discussed in detail later in the chapter. Figure 2 shows the recommended improvements, which correspond to Alternative 2.

- 1. I-40 / NC 68 / I-73 Connector
- 2. Airport Connector (From I-40 / NC 68 Connector to Forsyth County)
- 3. Sandy Ridge Road (SR 1850) Extension

This plan is a joint effort of NCDOT, Greensboro MPO, High Point MPO, Winston-Salem MPO, and PART. This plan is intended to provide the Piedmont area with the necessary roadway improvements to satisfy the anticipated transportation needs for the airport study area until the year 2025. NCDOT, the Greensboro MPO, High Point MPO, Winston-Salem MPO, and PART are jointly responsible for the proposed transportation improvements.

The proposed improvements were included in a revision to the Greensboro Urban Area Metropolitan Planning Organization (MPO) Thoroughfare Plan, map dated May 28, 2003.

It should be emphasized that the recommended plan is based on anticipated growth of the urban area as indicated by current trends. Prior to construction of specific projects, a more detailed

Future Year

The date in the future that a transportation study will be projected, usually 20-30 years. This study was projected to 2025.

Thoroughfare Plans

NCDOT and the MPOs are currently in a transition from a throughfare plan to a comprehensive (non-fiscally constrained) transportation plan, based on revised state law. This should not be confused with the long-range transportation plan (which is fiscally constrained), which MPOs have to periodically update to meet Federal requirements.



study will be required to reconsider development trends and to determine specific locations and design requirements.

2.3 Study Recommendations

The process of developing, testing and evaluating alternative plans involved several considerations. These included the goals and objectives of the area, identified deficiencies (see Chapter 3), environmental impacts, existing and anticipated land development, and travel services. Aerial



Alternative 2 is the recommended alternative for this study.

photography, topographic mapping, field reconnaissance and discussion with local staff, officials, and interested local citizens provided additional basis for identifying and evaluating recommendations for the study area. Figure 2 shows the recommended roadway improvements for the study. Alternative 2 (see Chapter 6) is the recommended alternative, with a preliminary cost estimate of \$190 million.

2.3.1 I-40 / NC 68 /I-73 Connector - Purpose and Need

- □ **Project recommendation:** It is recommended that a new location six lane divided freeway be constructed between NC 68 and the proposed Bryan Boulevard relocation. The freeway should start at the existing I-40 / I-40 Business interchange, cross Market Street (SR 1008) with a grade separation, connect to NC 68 with an interchange, and extend to the proposed Bryan Boulevard Relocation / Old Oak Ridge Road (SR 2137) interchange (TIP U-2815). This route will provide travelers that desire to go north of Greensboro from the High Point or Winston Salem areas a more direct route to the Greensboro Western Loop (U-2524).
- improve east-west travel in the airport area, and provide a more direct route to the Greensboro Western Loop, US 220, and US 29. The 2025 Traffic on this route is anticipated to be between 47,000 (near I-40) and 70,000 vpd (vehicles per day) (near Bryan Boulevard).
- Capacity: This route will help alleviate anticipated congestion problems in and near

Capacity

The number of vehicles that can pass a given point during a specified period under prevailing roadway, traffic, and control conditions. This assumes that there is no influence from downstream traffic operation, such as a backing up of traffic into the analysis point. (Highway Capacity Manual, 2000)



I-40, and NC 68, and the I-40 / NC 68 interchange. It will also greatly improve east-west travel in the airport area and the western part of Guilford County. This route is anticipated to reduce the traffic on I-40 between I-40 Business and the Western Urban Loop by approximately 30,000 vpd (vehicles per day) in 2025.

- Safety Issues: The construction of this project will decrease future congestion and delays on I-40 and NC 68. The construction of this project is also needed to provide better mobility for the surrounding MPOs of Greensboro, High Point, and Winston-Salem. It will also provide for an alternative route in the event of a crash on I-40. It will decrease crash potential for NC 68, US 70, and I-40.
- □ **Social Demands/Economic Development:** The I-40 / NC 68 / I-73 connector project should have a positive impact on economic development, and improve automobile transportation in the western Guilford County area.
- □ **System Linkage:** This project will provide a more direct connection from I-40 / I-40 Business to the northern travel desires on the Greensboro Western Urban Loop such as US 220 and US 29, and NC 68. This project will also give a more direct route to the ______

The Forsyth

Relationship to Other Plans: This project is included on the Greensboro Urban Area Thoroughfare Plan. The eastern terminus of this project is the Bryan Boulevard Relocation, which is included in the 2004-2010 Transportation Improvement Program

County portion of this project is shown on the Winston-Salem MPO Thoroughfare Plan.

(TIP) as project R-2815.

Piedmont Triad International Airport.

□ **I-73 Information:** A section of this project between NC 68 and the proposed Bryan Boulevard Relocation is proposed to be designated as a part of the I-73 corridor. Currently, I-73 is proposed to travel along the NC 68 - US 220 Connector (TIP Project R-2413), and take Bryan Boulevard to the Western Greensboro Loop (TIP Project U-2524).

Transportation Improvement Program

Contains funding information and schedules for North Carolina transportation projects.
Commonly referred to as the TIP.

Transportation Improvement Program

The latest TIP with project maps can be found at: http://www.ncdot.org/planning/development/TIP/



Section 330(a) of the National Highway System Designation Act of 1995 has identified I-73/I-74 as a high priority corridor. The act states that in North Carolina, the I-73 corridor shall generally follow US 220 from the Virginia State line to NC 68 in the vicinity of Greensboro. These highways will extend from Detroit, Michigan, and Rock Island, Illinois, through North Carolina to Charleston, South Carolina. Section 330(b) of the Act designates I-73/I-74 as a future part of the interstate system.

Modal Relationships: This project will also give a more direct route to the Piedmont Triad International Airport and provide a more direct access to the new Fed Ex facility.

2.3.2 Sandy Ridge Road (SR 1850) Extension - Purpose and Need

- Project recommendation: It is recommended that a new location four lane divided facility be constructed between Market Street (SR 1008) and the proposed I-40 / NC 68 / I-73 connector (see above). This route will provide travelers on Market Street (SR 1008) and High Point access to the I-40 / NC 68 / I-73 connector, and in conjunction with the Airport Connector (see below), improved access to the Airport Area and Forsyth County.
- □ **Transportation Demand:** In conjunction with the I-40 / NC 68 / I-73 connector, this route will improve east-west travel in the airport area, and provide a more direct route to the Greensboro Western Loop, US 220, and US 29. The 2025 Traffic on this route is anticipated to be approximately 21,000 vpd.
- □ **Capacity:** In conjunction with the I-40 / NC 68 / I-73 connector, this route will help alleviate anticipated capacity problems in and near I-40, and NC 68, and the I-40 / NC 68 interchange. It will also greatly improve east-west travel in the airport area and the western part of Guilford County.
- Safety Issues: In conjunction with the I-40 / NC 68 / I-73 connector, the construction of this project will decrease future congestion and delays on I-40 and NC 68. The construction of this project is also needed to provide better highway access for the surrounding MPOs of Greensboro, High Point, and Winston-Salem.

The intersection of Sandy Ridge Road (SR 1850) and Market Street (SR 1008) is near a crossing with the Norfolk Southern Railroad, which runs



roughly parallel to Market Street (SR 1008). A safety concern is the conflict with vehicular and train traffic as the traffic increases on Sandy Ridge Road (SR 1850). This railway carries three trains per day at an average speed of approximately 35 miles per hour. Careful consideration of the railroad facilities must be considered at this intersection. A trumpet interchange will be needed north of this intersection to help grade separate (bridge over) the railroad and conflicting vehicular traffic.

- Social Demands/Economic Development: In conjunction with the other recommendations in this report, the extension connector project should have a positive impact on economic development, and improve automobile transportation in the western Guilford County and High Point area. It will help facilitate faster travel to the airport.
- □ **System Linkage:** The extension will more directly connect from I-40 / I-40 Business to the northern travel desires on the Western Urban Loop such as US 220 and US 29, and NC 68. This project will also give a more direct route to the Piedmont Triad International Airport from western Market Street (SR 1008) and High Point.
- Relationship to Other Plans: This project is included on the Greensboro Urban Area Thoroughfare Plan.
- □ **Modal Relationships:** In conjunction with the I-40 / NC 68 / I-73 connector, this project will also give a more direct route to the Piedmont Triad International Airport.

2.3.3 Airport Connector - Purpose and Need

- Project recommendation: It is recommended that a new location four lane divided freeway be constructed between NC 150 (in Forsyth County) and the proposed I-40 / NC 68 / I-73 connector (see above). This route will provide travelers on Market Street and Winston-Salem access to the I-40/NC 68/I-73 connector, and improve access to the Airport Area and northern Greensboro.
- □ **Transportation Demand:** This route will improve east-west travel in the airport area, and provide a more direct route to the Greensboro Western Loop and Northern Kernersville. The 2025 traffic on this route is anticipated to be approximately 24,000 vpd.
- □ **Capacity:** This route will help alleviate anticipated capacity problems in



and near I-40, and NC 68, and the I-40 / NC 68 interchange. It will also greatly improve east-west travel in the airport area and the western part of Guilford County, and the eastern part of Forsyth County.

- □ **Safety Issues:** The construction of this project will decrease future congestion and delays on I-40 and NC 68. The construction of this project is also needed to provide better highway transportation for the surrounding MPOs of Greensboro, High Point, and Winston-Salem. It will also provide an alternative to I-40 during peak congestion periods or if there is some other delay, such as a automobile crash.
- Social Demands/Economic Development: In conjunction with the other recommendations in this report, the Airport Connector project should have a positive impact on economic development, and improve transportation in the western Guilford County area and eastern Forsyth County.
- System Linkage: This project will more directly connect from I-40 / I-40 Business to the northern travel desires on the Western Urban Loop such as US 220 and US 29, and NC 68. This project will also give a more direct route to the Piedmont Triad International Airport from eastern Forsyth County.
- Relationship to Other Plans: This project is included on the Greensboro Urban Area Thoroughfare Plan. The portion of the Airport Connector between NC 150 and the Guilford County Line is included on both the Winston-Salem Long-Range Transportation Plan and Thoroughfare Plan.
- Modal Relationships: This project will also give a more direct route to the Piedmont Triad International Airport for automobiles and trucks. Bus shuttle service, which is administered by PART (Piedmont Authority for Regional Transportation), will enjoy better access to the airport.

2.3.4 Other Recommendations

□ Sandy Ridge Road (SR 1850) Widening: To improve safety and capacity, it is recommended to widen Sandy Ridge Road (SR 1850), to a four lane divided facility. Some nearby homes adjacent to the roadway may need to be relocated if this project is implemented. The 2025 estimated ADT is 19,000 vpd. At press time, this project is not yet included in the Greensboro Urban Area Long-Range Transportation Plan.



□ **Pegg to Thatcher Connector:** One project on the 2001 Greensboro Urban Area Long Range Transportation Plan is to connect Pegg Road and Thatcher Roads with a bridge over I-40, to help facilitate local traffic movements. This bridge would be west of the existing NC 68 / I-40 interchange. Due to the expense of improving the I-40/NC 68 interchange, this project is a unique way to divert some of the traffic from using that interchange.

2.4 Deletions from Greensboro LRTP

These projects are proposed to be deleted from the Greensboro Long-Range Transportation Plan (LRTP) and Thoroughfare Plan as a result of the Piedmont Triad Airport Transportation Study.

- Sandy Ridge Road (SR 1850) Connector: This project was proposed to connect Sandy Ridge Road (SR 1850) to Pleasant Ridge Road (SR 2133). An early alternative indicated that this concept would overload Pleasant Ridge Road (SR 2133) by the year 2025 as traffic tries to avoid the I-40 / NC 68 interchange. Sandy Ridge Road (SR 1850) and Pleasant Ridge Road (SR 2133) would partially function as the I-40 / NC 68 / I-73 connector if this project is implemented. Due to the unacceptable level of service on Pleasant Ridge Road (SR 1850) that is caused by this project, this connector is recommended to be dropped from both local transportation plans.
- Airport Parkway Extension: This project was proposed to connect Bryan Boulevard (SR 1850) to Pleasant Ridge Road (SR 2133). With the implementation of the other proposals in this chapter, this project appears to have little value to the overall transportation system in the area. Besides the construction of the roadway portion of this project, this project would require reconstructing the NC 68 / Brain Boulevard interchange. With the other surrounding improvements added to the thoroughfare plan, the Airport Parkway Extension was recommended to be dropped from local transportation plans.

However, late in the process, the City of Greensboro wanted to keep this project on their adopted thoroughfare plan for economic development reasons, and the project was not deleted from the thoroughfare plan. If this project is constructed before the I-40 / NC 68 / I-73 connector, care must be taken to ensure that the Airport Parkway Extension does not become part of the ultimate connector facility. If constructed, the Airport Parkway Extension should have no more than two lanes and allow adjacent land access. A



multilane facility will increase the possibility that the Extension will be used as part of the I-40 / NC 68 / I-73 connector.

2.5 Phasing of the construction projects

Due to the expense of construction, large projects are often broken down into separate sections for construction. The construction of the new location facilities of the airport study are proposed to be phased and constructed when transportation congestion and delays are unacceptable. During the study process, the committee requested that a proposed construction phasing plan be added to the documentation of this study.

The I-40 / NC 68 / I-73 connector is recommended to be divided into 3 parts:

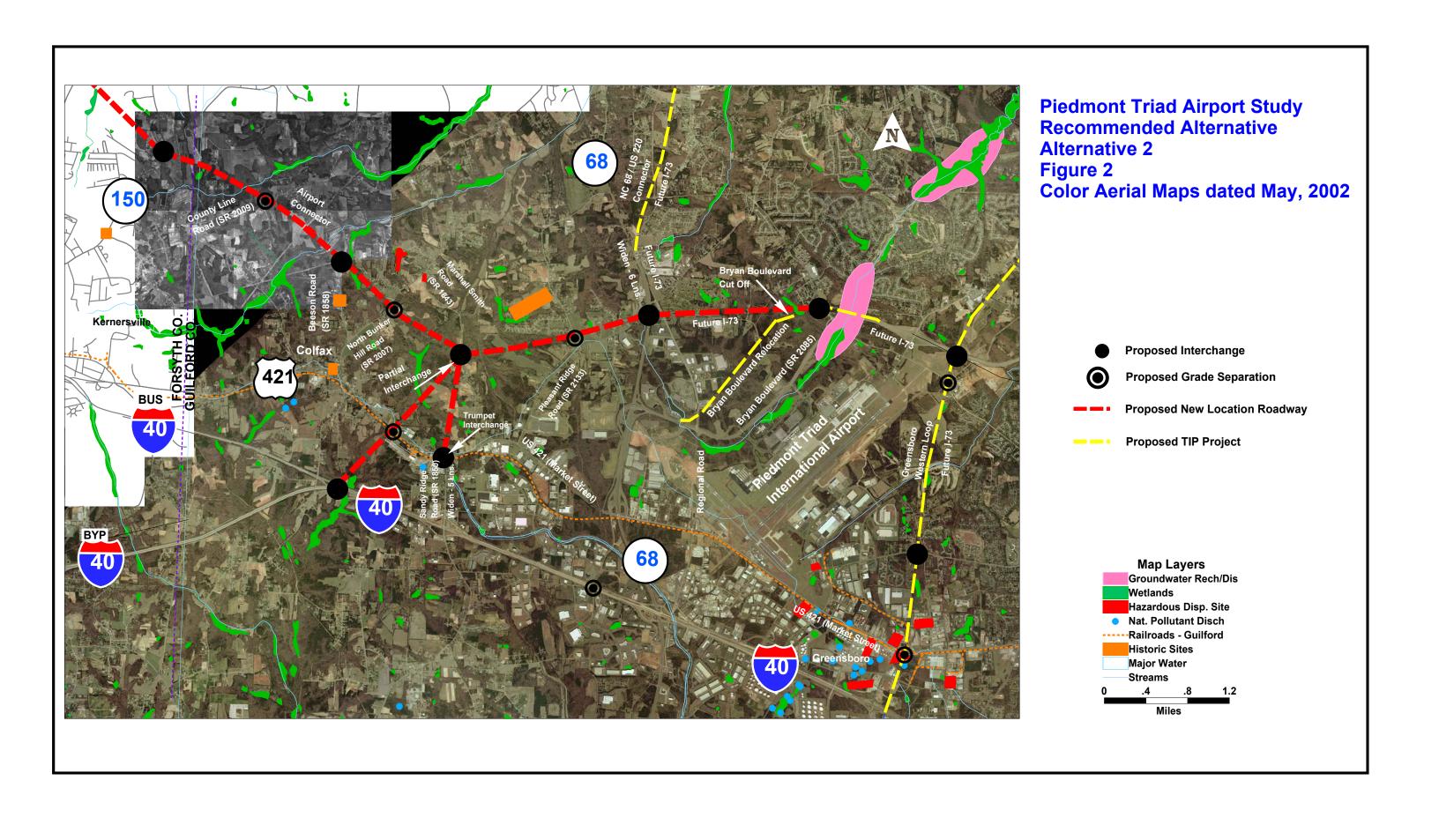
- □ Section A between NC 68 and the Bryan Boulevard Relocation
- Section B between Sandy Ridge Road Extension and NC 68, including Sandy Ridge Road Extension
- □ Section C between I-40 Business and the proposed Sandy Ridge Road Ext.

This is the proposed phasing of construction of the major airport area transportation projects.

- □ Phase 1 construction of Section A of the I-40 / NC 68 / I-73 connector. This will facilitate and reduce travel time for I-73 motorists.
- Phase 2 construction of the Sandy Ridge Road Extension and section B of the I-40 / NC 68 / I-73 connector. This will relieve some of the I-40 / NC 68 interchange congestion.
- Phase 3 construction of section C of the I-40 / NC 68 / I-73 connector. This will give Winston-Salem and High Point direct access to the northern part of the study area. The process of reconstructing the I-40 Business / I-40 interchange to accommodate the additional movement will be challenging.
- Phase 4 complete the Airport Connector from the Sandy Ridge Road Extension to Forsyth County. This will give northern Forsyth County direct access to the airport area and northern Greensboro without having to travel on I-40.



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Back of Figure 2



Chapter 3 – ANALYSIS OF EXISTING ROADWAY SYSTEM

This chapter presents an analysis of the ability of the existing street system to serve the area's travel desires. Emphasis is placed not only on detecting the deficiencies, but also on understanding their cause. Travel deficiencies may be localized and the result of substandard highway design, inadequate pavement width, or intersection controls. Alternately, the underlying problem may be caused by a



system deficiency such as a need for a bypass, loop facility, construction of missing links, or additional radials.

An analysis of the roadway system must first look at existing travel patterns and identify existing deficiencies. This includes roadway capacity and safety analysis. After the existing picture of travel in the area has been developed, the engineer must analyze factors that will impact the future system. These factors include forecasted population growth, economic development potential, and land use trends. This information will be

used to determine future deficiencies in the transportation system.

Traffic Count Data

Twenty-four (24) hour average daily traffic counts were obtained by NCDOT. These counts were used to establish traffic conditions in the study area.

Traffic count data can be found at http://www.ncdot.org/planning/statewide/gis/DataDist/GISTrafSurvMaps.html

3.1 Study Area

The study area, as illustrated in Figure 1, is located in the western part of Greensboro / Guilford County, and a portion of western Forsyth County. Most of the land in the study area is relatively open and rural, with scattered residential use east of NC 68 and more commercial development located around Market Street (SR 1008) and the Piedmont Triad International Airport (PTIA). The Norfolk Southern Railroad runs roughly parallel to Market Street (SR 1008), and has an atgrade intersection on Sandy Ridge Road (SR 1850). The study area includes I-40, I-40 Business, NC 68, and Bryan Boulevard. The PTIA is located on the north side of Market Street (SR 1008), and east of NC 68.

3.2 Existing Facilities

The following is a description of the major facilities in the study area.

□ **I-40** runs roughly east-west through the study area and is a primary carrier of through traffic. It was recently upgraded to six to eight lanes with project I-



2201. I-40 is a controlled access facility with interchanges at I-40 Business, Sandy Ridge Road (SR 1850), and NC 68. It is classified as a major thoroughfare on the Greensboro Urban Area Thoroughfare Plan.

- Market Street (SR 1008) is roughly parallel to I-40 and serves adjacent commercial and residential land use, with no control of access. The cross section of Market Street (SR 1008) ranges between 2 and 5 lanes. It is classified as a major thoroughfare on the Greensboro Urban Area Thoroughfare Plan.
- NC 68 is a north-south facility that connects Rockingham County and the City of High Point with I-40. It includes interchanges with Market Street (SR 1008), Bryan Boulevard (SR 2085), and I-40. There are some other at-grade intersections on NC68, mostly north of Bryan Boulevard (SR 2085). NC 68 is partially access controlled and four lane divided south of Bryan Boulevard (SR 2085). It is classified as a major thoroughfare on the Greensboro and High Point Urban Area Thoroughfare Plans.
- □ **Bryan Boulevard (SR 2085)** is a partially access controlled facility that connects Greensboro with the airport area and NC 68. It is classified as a major thoroughfare on the Greensboro Urban Area Thoroughfare Plan.
- □ **Sandy Ridge Road (SR 1850)** is a two-lane facility with no access control (in the study area). In conjunction with Johnston Street, this facility connects Market Street (SR 1008) and I-40 to downtown High Point.

A problem with this roadway is that the Norfolk Southern Railroad operates very close to the intersection of Sandy Ridge Road (SR 1850) and Market Street (SR 1008). The railroad crosses Sandy Ridge Road (SR 1850). At times, backups occur during train crossings. Some officials have expressed a desire to grade separate the railway and Sandy Ridge Road (SR 1850) to improve safety and capacity. This railway carries three trains per day at an average speed of approximately 35 miles per hour.

Twenty-four (24) hour average daily traffic counts were obtained by NCDOT. These counts were used to establish traffic conditions in the study area.

3.3 Programmed Transportation Projects

There are five major transportation projects in the *NCDOT 2004-2010 Transportation Improvement Program* in the immediate vicinity of the study area that are expected to significantly impact traffic patterns in future years. These projects are described as the following:



- U-2815 Bryan Boulevard Relocation Relocate Bryan Boulevard west of the third runway at PTIA. Four lane divided, control of access. Construction in 2004.
- □ U-4015 Gallimore Dairy Road (SR 1556) Widen from NC 68 to Market Street. Construction on segments begins in 2004.
- R-2413 NC 68 / US 220 Connector construct a new four lane divided facility from NC 68 (Near Edgefield Road (SR 2011)) to US 220. Construction on some sections begins in 2004.
- U-2524 Western Urban Loop Construct a freeway- around Greensboro. This project is under construction.
- □ R-2611 Market Street (SR 1008) widen to multi lanes from Colfax to NC 68. Construction to begin in 2009.
- □ I-2201 I-40 Widening Under construction.

Since each of these projects are funded, it is assumed they will be in place by 2025.

3.4 Non - Programmed Transportation Projects

There are three major transportation projects in the *2025 Greensboro Long Range Transportation Plan (2001)* (LRTP) in the immediate vicinity of the study area that are expected to significantly impact traffic patterns in future years. These projects are not funded and are described as the following:

- Sandy Ridge Road Connector Between I-40 and Pleasant Ridge Road new location, 5 lanes. (LRTP Project #B30).
- Pegg to Thatcher Connection Connector Road over I-40 (LRTP Project #B33)
- NC 68 at Triad Center Drive construct interchange (TIP Project U-4408)

3.5 Thoroughfare Plans

Thoroughfare Plans are a tool to aid officials in the development of an appropriate street system. It is important that the MPOs within the Triad area continue their cooperation as a team in the development of this transportation system. Plan development and implementation jointly undertaken will help ensure the development of an efficient system for travel throughout the Triad Area.

Recent Law
Revisions

Note: Due to recent revisions in state law, (§136-66.2) NCDOT and the MPOs are in a transition from a thoroughfare plan to a comprohensive transportation plan, which is not fiscally constrained. For the purposes of this report, we are referring to the thoroughfare plan as a tool for long range planning. The transition to this new type of plan format has yet to be finalized.

Thoroughfare Plans are not fiscally constrained and may identify current and long-range projects.



An MPO Long-Range Transportation Plan is fiscally constrained. Therefore, only those thoroughfare plan elements that can reasonably be expected to be funded within the planning period are included in the Long-Range Transportation Plan (LRTP). An LRTP can cover all modes of transportation.

- Greensboro Thoroughfare Plan For the thoroughfare plan map dated May 28, 2003, the latest MPO update was on May 28, 2003, and the latest North Carolina Board of Transportation update was on August 7, 2003. The last Greensboro Long-Range Transportation Plan is dated October 1, 2001.
- High Point Thoroughfare Plan For the map dated September 25, 2001, the latest adoption by the TAC was on September 25, 2001, and by the North Carolina Board of Transportation on November 8, 2001. The last High Point Long-Range Transportation Plan is dated October 1, 2001.
- Winston-Salem Thoroughfare Plan For the map dated February 28, 2002, the latest adoption by the TAC was on February 28, 2002 and by the North Carolina Board of Transportation on June 6, 2002. The last Winston-Salem Long-Range Transportation Plan is dated March 1, 2002.

3.6 Capacity Analysis of the Existing System

An indication of the adequacy of the existing street system is a comparison of traffic volumes versus the ability of the streets to move traffic freely at a desirable

speed. The ability of a street to move traffic freely, safely, and efficiently with a minimum delay is controlled primarily by the spacing of the major intersections. Thus, the ability of a street to move traffic can be increased by restricting parking and turning movements, using proper sign and signal devices, and by the application of other traffic engineering strategies.

□ Level of Service

Level of Service information can be found in the latest copy of the Highway Capacity Manual.

Capacity is the maximum number of vehicles which has a "reasonable expectation" of passing over a given section of a roadway, during a given time period under prevailing roadway and traffic conditions. The relationship of traffic volumes to the capacity of the roadway will determine the level of service (LOS) being provided. Six levels of service have been selected for analysis purposes. They are given letter designations from A to F with LOS A representing the best operating conditions and LOS F the worst.

Given a do-nothing scenario, with none of the projects listed in Recommendations Chapter implemented (and other transportation plan projects listed in the Greensboro, High Point, and Winston-Salem Long Range Transportation Plans implemented and constructed), the following roadways are anticipated to be over capacity in the year 2025 (in the study area)



- □ I-40
- □ I-40 Business
- □ NC 68
- □ Sandy Ridge Road (SR 1850)

The following roadways are anticipated to be near capacity (80-100% of practical capacity) by the design year:

- Bryan Boulevard (relocated)
- Pléasant Ridge Road (SR 2133)
- Regional Road
- □ Crosscreek Road (SR 2001)

3.7 Traffic Crashes

Certain types of traffic crashes are often used as an indicator for locating congestion problems. Crash records can also be reviewed to identify problem locations or deficiencies such as poor design, inadequate signing, ineffective parking, or poor sight distance. Crash patterns developed from analysis of data can lead to improvements that will reduce the number of crashes.

Traffic crashes were considered in the development of this plan. The recommendations presented in Chapter 2 will reduce congestion on major routes such as I-40 and NC 68. This congestion reduction should reduce traffic crashes.

The High Crash Locations (greater than 25) for Guilford County in the study area between January 1, 2000 and April 30, 2002, are noted below:

I-40 @ NC 68 had 73 crashes

- □ Rear End, Slow or Stop (43)
- □ Angle (8)
- □ Sideswipe, Same Direction (7)
- Ran off Road, Left (5)
- □ Others (Less than 5 occurrences per type) (11)

I-40 @ Sandy Ridge Road had 45 crashes

- □ Rear End, Slow or Stop (23)
- Anale (8)
- Others (Less than 5 occurrences per type) (14)

Friendly @ Market Street had 38 crashes

- □ Angle (12)
- □ Rear End, Slow or Stop (8)
- □ Left Turn, Same Roadway (6)
- □ Others (Less than 5 occurrences per type) (12)



I-40 @ Chimney Rock Road had 35 crashes

- Rear End, Slow or Stop (23)
- Others (Less than 5 occurrences per type) (12)

I-40 Business @ I-40 Bypass had 25 crashes

- Rear End, Slow or Stop (14)
- Others (Less than 5 occurrences per type) (11)

The crash data provided above is from an Crash Summary Report provided by the NCDOT Traffic Engineering Branch.



Chapter 4 – FACTORS AFFECTING THE FUTURE ROADWAY SYSTEM

The objective of this study was to develop a transportation system that will meet future travel demand and enable people and goods to travel safely and economically. To determine the needs of an area it is important to understand the role of population, economics, and land use have on the highway system. Examination of these factors helps to explain historic travel patterns and lays the groundwork for transportation planning.



In order to formulate an adequate 2025 transportation plan, reliable forecasts of future travel characteristics must be achieved. The factors of population, vehicle usage trends, economy and land use play a significant role in determining the transportation needs of the area, and must be carefully analyzed.

The first step in the development of this study is to define the planning period and the planning area. The planning period is typically on the order of 30 years. The base year for the Triad Travel Demand model was 1994, and the future year forecasts were for 2025. For the purposes of this study 2000 traffic counts served as base year data, and the 2025 fiscally constrained long range transportation plan served as the future year model network.

4.1 Project Assumptions

Some of the major assumptions of the Piedmont Triad Area Airport Study are outlined below. These assumptions are:

- □ I-73 will travel down the US-220 / NC 68 Connector (R-2413). This project is expected to be constructed after 2008 and was assumed to carry the future I-73 traffic. The construction of I-73 is needed to improve north-south highway transportation from Detroit, Michigan to Charleston, South Carolina.
- Federal Express will be in place at the Piedmont Triad International Airport. The additional traffic of the Federal Express hub has necessitated the relocation of Bryan Boulevard (SR 2085) (TIP Project U-2815). Construction should begin in 2004.



- Winston-Salem has identified a "Regional Airport Connector" that is currently on their adopted thoroughfare plan. This connector ties into their Outer Loop and crosses the Forsyth / Guilford County line south of where NC 150 crosses the Guilford County line. Greensboro does not currently have the Regional Airport Connector on their mutually adopted thoroughfare plan. The Winston-Salem and Greensboro Thoroughfare Plans do not match with this project. Any future roads will consider the Forsyth portion of the "Regional Airport Connector" to be constructed.
- The City of High Point would like to improve access to the Piedmont Triad International Airport (PTIA). Concerns had been raised by High Point officials about this matter.
- All projects on the Greensboro, High Point, and Winston-Salem Long-Range Transportation Plans are in place by 2025.
- □ There is a major travel desire between Business I-40 and the Greensboro Western Loop.

4.2 Land Use Scenario

The amount of traffic on a section of roadway is a function of the size and location of the population that it serves. The future year traffic projections for the Airport Study were taken from various model runs using the Triad Travel Demand Model, with a future year of 2025.



This land use scenario, which assumes "business as usual" growth was used for the future year transportation forecasts.

As with any future year model, projections are needed. Socioeconomic Data Projections for the

Triad Travel Demand Model were developed through a multi-step process, which is outlined in detail in the report *Piedmont Triad Regional Travel Demand Model Technical Report #2: Development and Evaluation of Land Use Scenarios.*

The Trend Line Land Use Scenario, which assumes "business as usual" approach to growth in the Triad Region was used. It assumes continued expansion of low-density, auto-oriented, segregated development into rural areas. The above mentioned report outlines in detail the number of households and employment distributed throughout the Triad Travel Demand Model.



Chapter 5 – PRELIMINARY ALTERNATIVES

The intent of this study is to identify feasible and costeffective transportation alternatives which can safely and efficiently meet the identified future transportation needs of the study area, and which should be considered for inclusion in the next Greensboro Urban Area Thoroughfare Plan. This section discusses these alternatives. These alternatives were considered, and then narrowed down to four and "tweaked" to be presented to the public.



The meeting to discuss all of these alternatives was held on October 2, 2002. The committee decided to present to the public four alternatives: E, G, I, and L (discussed below) and the no-build scenario. The other alternatives were dropped. The public meeting was held on November 14, 2002, and a summary of the findings can be found in Chapter 7.

One of the goals of the airport study was to improve access to the airport using public transportation. Besides the no build scenario, all the alternatives improve the opportunities for public transportation.

5.1 No Build or "Do Nothing" Alternative

There is always the option for the "do nothing" and leave the existing roadway facilities as they are. While this alternative does not incur design and construction cost, it is costly in that it will not alleviate the projected traffic congestion and safety deficiencies. If no improvements are made to the Piedmont Triad Airport area, then the existing facilities will likely have congestion delays. Given the projected level of congestion and existing traffic safety deficiencies, this approach was not strongly considered and was dismissed.

5.2 Alternative A

This alternative investigated the existing Greensboro Long-Range Transportation Plan and current Greensboro Urban Area Thoroughfare Plan. It was quickly decided that the existing Greensboro thoroughfare plan projects would not provide sufficient congestion relief for the airport area, so this alternative was not considered.

This alternative investigated extending the Airport Connector on the Winston-Salem Thoroughfare Plan and connecting to Bryan Boulevard near the proposed Old Oak Ridge Road / Bryan Boulevard interchange. The proposed Sandy Ridge



Road location would connect Pleasant Ridge Road (SR 2133) to the Sandy Ridge Road / I-40 interchange.

Advantages

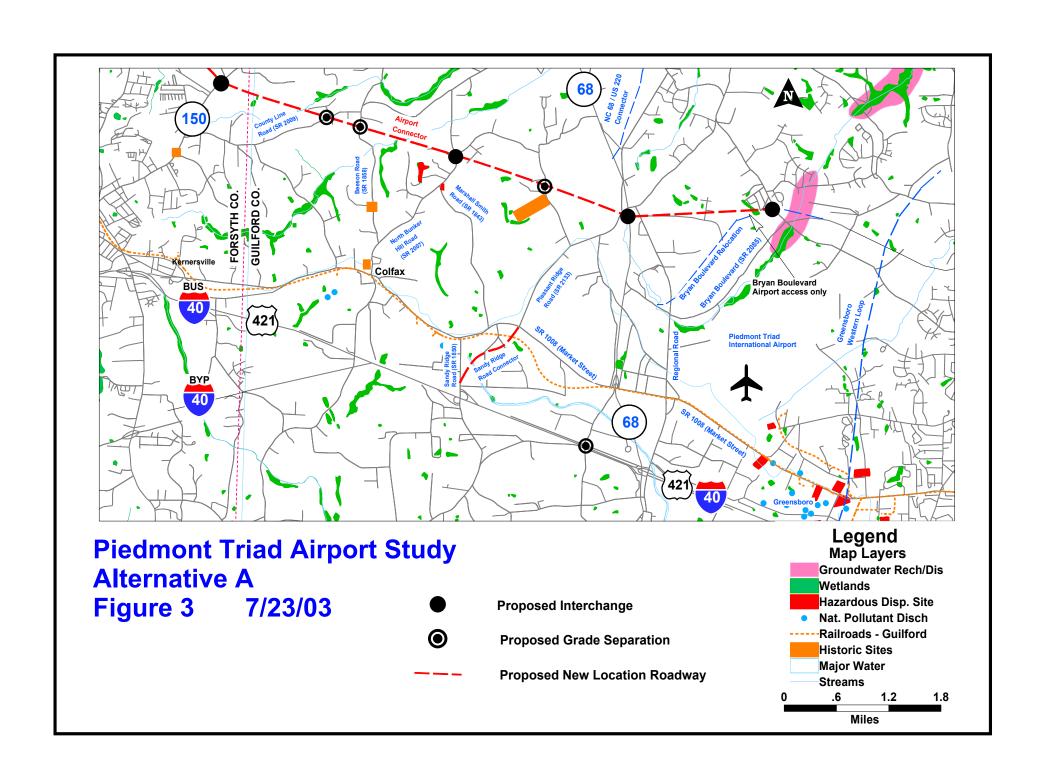
- Uses some existing thoroughfare plan alignments
- □ Would relieve I-40 and NC 68 congestion.
- □ Provides access to Market Street (SR 1008).
- □ Least amount of wetland impacts of any alternative (see Chapter 7)
- Requires the lowest number of new interchanges and grade separations of any studied alternative

Disadvantages

- □ Funnels through traffic on Pleasant Ridge Road (SR 2133), as motorists attempt to avoid the busy I-40 / NC 68 interchange. This alternative would require widening of Pleasant Ridge Road (SR 2133).
- Does not relieve traffic congestion as much as some other alternatives.
- □ Would require "cutting off" the relocated Bryan Boulevard.
- Provides for an at-grade intersection of the Norfolk Southern Railroad, which will be difficult to implement.

This alternative was presented to the Airport Committee on October 26, 2000. This alternative was not chosen due to the possible widening of Pleasant Ridge Road (SR 2133). It was decided that the existing Greensboro thoroughfare plan projects would not provide sufficient congestion relief for the airport area, so this alternative was dropped. See Figure 3 for a map of Alternative A.

Table 1 - Alternative A Roadway Recommendations						
Section	Length (mi.)	# Lanes	cross section	2025 AADT		
Sandy Ridge Road (SR 1850)						
I-40 - Connector	0.20	5	5 lane urban	37,900		
Sandy Ridge Road Connector	0.97	5	5 lane urban	27,200		
Airport Connector						
NC 150 - North Bunker Hill Road	2.84	4	4 lane freeway	24,200		
North Bunker Hill Road - NC 68	2.09	4	4 lane freeway	24,200		
Pleasant Ridge Road (SR 2133)						
Market Street - Airport Conn.	1.95	4	4 lane urban div.	35,700		
I-73 Connector	1.66	6	6 lane freeway	64,600		





Back of Figure 3



5.3 Alternative B

This alternative is a variation of Alternative A, but it connects the I-40 / Business 40 split to the Airport Connector via a four lane divided freeway. The I-40 Business Extension would be grade separated over Market Street (SR 1008). A separate facility, the Sandy Ridge Road Extension would provide access to Market Street (SR 1008).

Advantages

- Would relieve I-40 and NC 68 congestion.
- □ This alternative is tied with 2 other alternatives for the lowest wetland impacts (see Chapter 6)

Disadvantages

- □ The I-40 Business Extension / Airport Connector interchange is too far west since the I-40 to northern Greensboro is the dominant traffic movement.
- Does not alleviate exposures to railroad traffic on Sandy Ridge Road (SR 1850).
- □ Would require "cutting off" the relocated Bryan Boulevard.

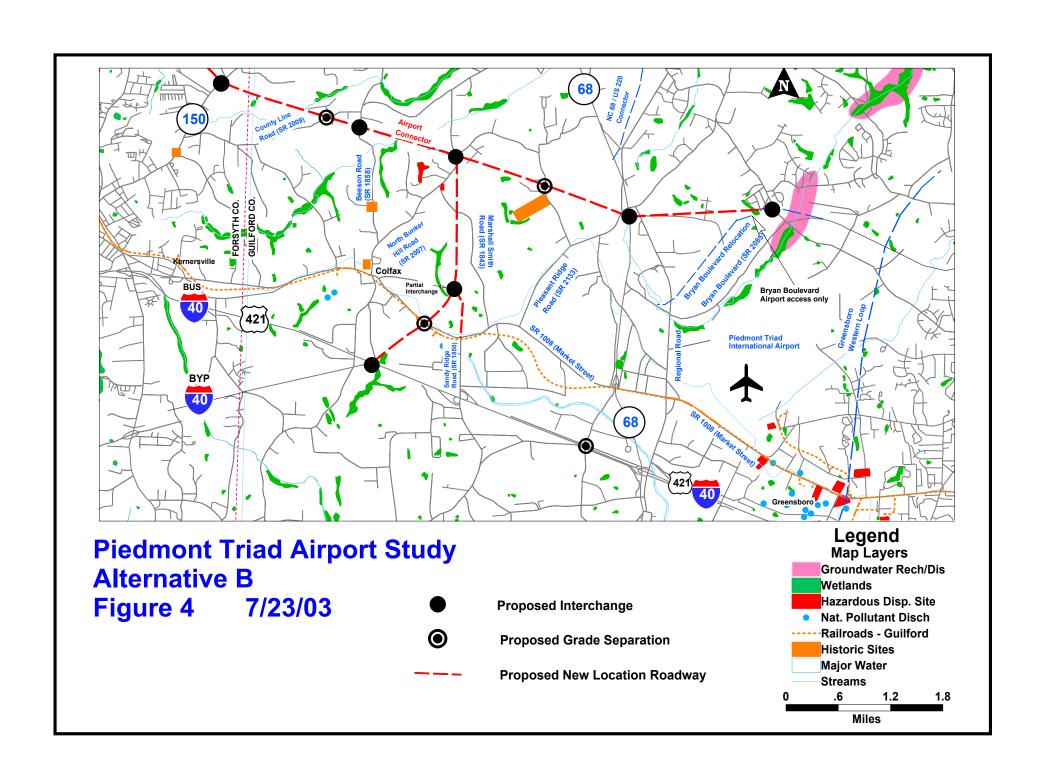
This alternative was presented to the Airport Committee on October 26, 2000. This alternative was not chosen because another similar alternative was preferred that moves the I-40 Business Extension / Airport Connector interchange east. See Figure 4 for a map of Alternative B. The awkward configuration made this alternative less attractive than the other alternatives and this alternative was dropped.

A complete list of environmental impacts can be found in Chapter 7.

Table 2 - Alternative B Roadway Recommendations						
Section	Length (mi.)	# Lanes	cross section	2025 aadt		
Sandy Ridge Road (SR 1850)						
I-40 - Market Street	0.71	5	5 lane urban	11,100		
Extension to I-40 Business Ext.	0.60	2	2 lane urban	4,500		
Airport Connector						
NC 150 - North Bunker Hill Road	1.68	4	4 lane freeway	22,100		
North Bunker Hill Road - I-40 Ext.	1.15	4	4 lane freeway	22,100		
I-40 Extension - NC 68	2.21	6	6 lane freeway	54,800		
I-40 Business Extension						
I-40 - Sandy Ridge Road Ext.	1.31	4	4 lane urban div.	35,100		
Sandy Ridge Ext Airport Connec.	1.52	4	4 lane urban div.	36,100		
I-73 Connector	1.66	6	6 lane freeway	65,800		



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5.4 Alternative C

This alternative investigated extending the Airport Connector on the Winston-Salem Thoroughfare Plan and connecting to Bryan Boulevard near the proposed Old Oak Ridge Road / Bryan Boulevard interchange. The proposed Sandy Ridge Road Extension would connect a relocated Market Street (SR 1008) to the Airport Connector.

Advantages

- Relocates a portion of Market Street (SR 1008) and relieves some congestion on the existing corridor.
- □ Would relieve I-40 and NC 68 congestion
- □ This alternative ties with 2 other alternatives for the lowest wetland impacts (see Chapter 7)

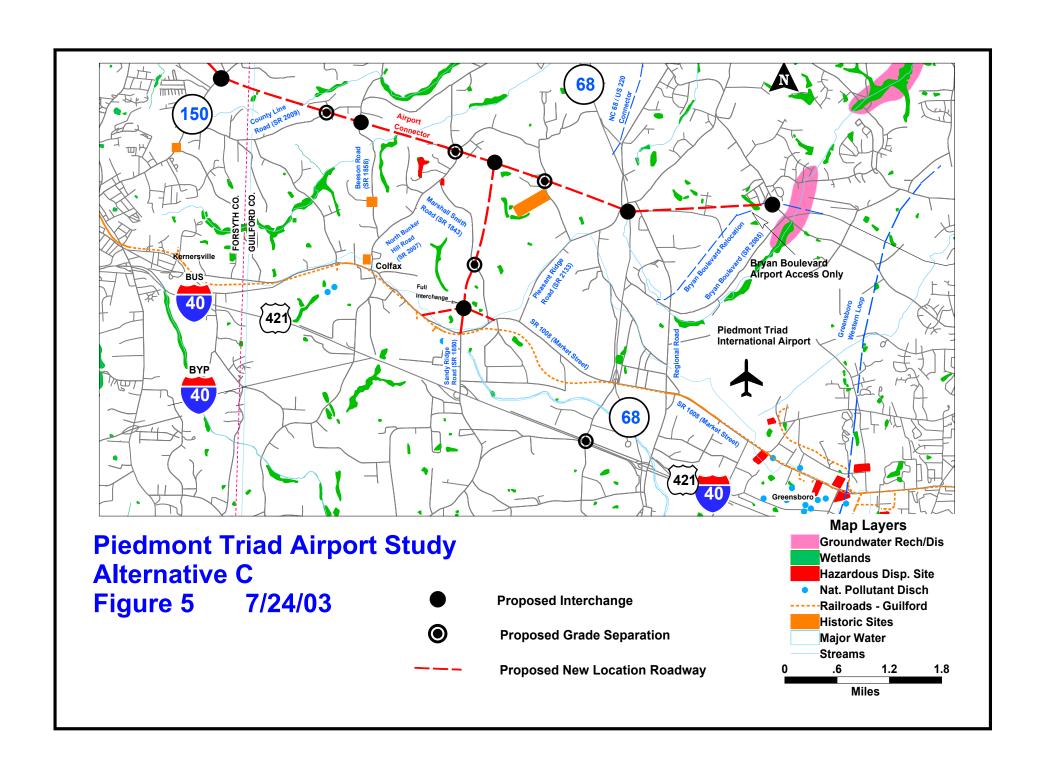
Disadvantages

- Would require "cutting off" the relocated Bryan Boulevard.
- □ Does not limit exposures to railroad traffic on Sandy Ridge Road (SR 1850).
- □ Would require widening Sandy Ridge Road (SR 1850) and would stress the Sandy Ridge Road (SR 1850) interchange.
- Close proximity of the interchange with the relocated Market Street and the existing Market Street (SR 1008) intersection.

This alternative was presented to the Airport Committee on October 26, 2000. This alternative was not chosen because of the widening of Sandy Ridge Road (SR 1850). See Figure 5 for a map of Alternative C.



Table 3 - Alternative C Roadway Recommendations					
Section	Length (mi.)	# Lanes	cross section	2025 aadt	
Sandy Ridge Road (SR 1850)					
I-40 - Market Street	0.71	5	5 lane urban	26,100	
Extension to Market Street Rel.	0.31	4	4 lane exprwy	22,000	
Market Street Rel Airport Conn.	1.71	4	4 lane freeway	21,300	
Airport Connector					
NC 150 - Beeson Road	1.70	4	4 lane freeway	36,200	
Beeson Road - Sandy Ridge Ext.	1.61	4	4 lane freeway	36,200	
Sandy Ridge Ext NC 68	1.63	6	6 lane freeway	49,600	
Market Street Relocation					
Eastern Section	0.49	5	5 lane urban	16,100	
Western Section	0.42	5	5 lane urban	11,400	
I-73 Connector	1.66	6	6 lane freeway	61,900	







5.5 Alternative D

This alternative investigated extending the Airport Connector on the Winston-Salem Thoroughfare Plan and connecting to Bryan Boulevard near the proposed Old Oak Ridge Road / Bryan Boulevard interchange. The proposed I-40 Extension would connect to the I-40 / I-40 Business split. Market Street would be accessed through a connector to an interchange on the I-40 Extension.

Advantages

- □ Would relieve I-40 and NC 68 congestion.
- □ Eliminates exposures to railroad traffic on Sandy Ridge Road (SR 1850).

Disadvantages

- □ Would require "cutting off" the relocated Bryan Boulevard.
- □ Traffic on Sandy Ridge Road will have to go "out of the way" to access Market Street (SR 1008).
- □ Has the most wetland impacts to any alternatives (see Chapter 7)

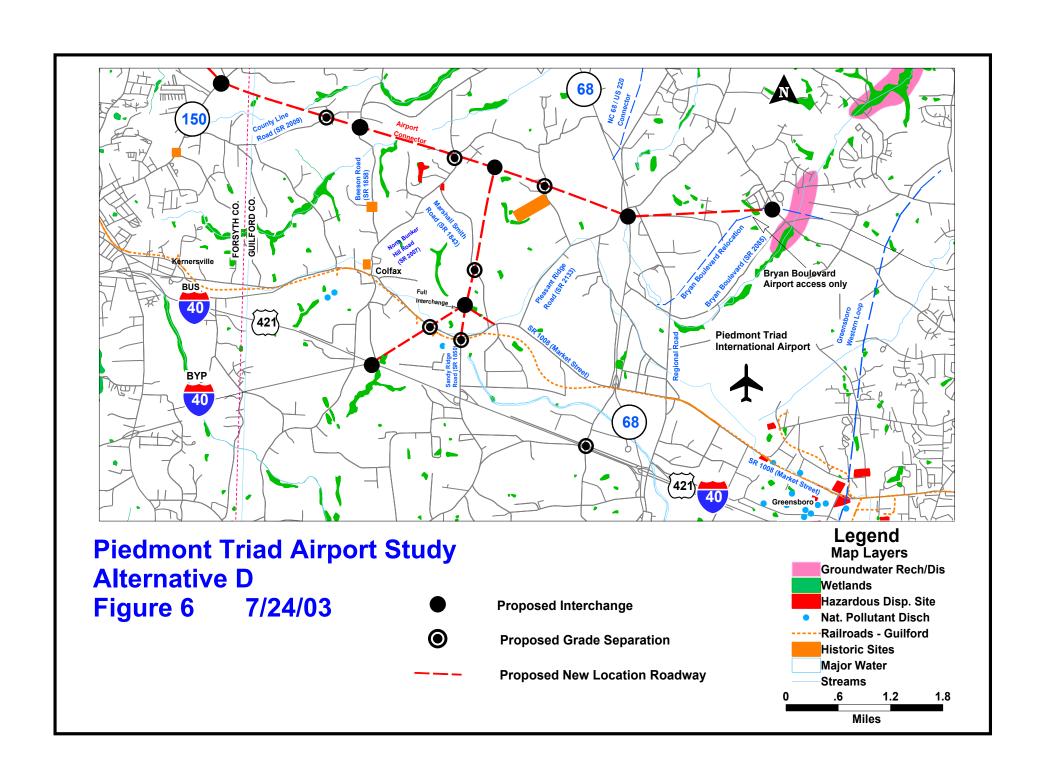
This alternative was presented to the Airport Committee on October 26, 2000.

The amount of wetland impacts in comparison to other alternatives makes this alternative doubtful to be permitted. This alternative also creates an awkward movement for traffic on Sandy Ridge Road (SR 1850) that desires to go to Market Street (SR 1008).

This alternative was not chosen because other alternatives were more appealing. See Figure 6 for a map of Alternative D.



Table 4 - Alternative D Roadway Recommendations				
Section	Length (mi.)	# Lanes	cross section	2025 aadt
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	12,000
Market Street Rel Airport Conn.	0.42	3	3 lane urban	12,000
Airport Connector				
NC 150 - Beeson Road	1.70	4	4 lane freeway	21,800
Beeson Road - Sandy Ridge Ext.	1.61	4	4 lane freeway	21,800
Sandy Ridge Ext NC 68	1.63	6	6 lane freeway	54,100
Market Street Relocation				
Market Street - I-40 Bus. Ext.	0.4	5	5 lane urban	11,000
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.29	4	4 lane freeway	50,600
Sandy Rid. Ext Airport Connect.	1.58	4	4 lane freeway	37,100
I-73 Connector	1.66	6	6 lane freeway	65,200







5.6 Alternative E

This alternative investigated extending the Airport Connector on the Winston-Salem Thoroughfare Plan and connecting to Bryan Boulevard near the proposed Old Oak Ridge Road / Bryan Boulevard interchange. The proposed I-40 Business Extension would connect to the I-40 / I-40 Business split and connect to the Airport Connector and the NC 68 /220 Connector. Sandy Ridge Road (SR 1850) would be extended to the I-40 Business Extension, with a trumpet interchange at Sandy Ridge Road (SR 1850).

Advantages

- □ Would relieve I-40 and NC 68 congestion.
- □ The trumpet interchange with Sandy Ridge Road (SR 1850) eliminates exposures to railroad traffic.
- □ Gives direct movement from the I-40 / I-40 Business split to the NC 68 US 220 Connector.

Disadvantages

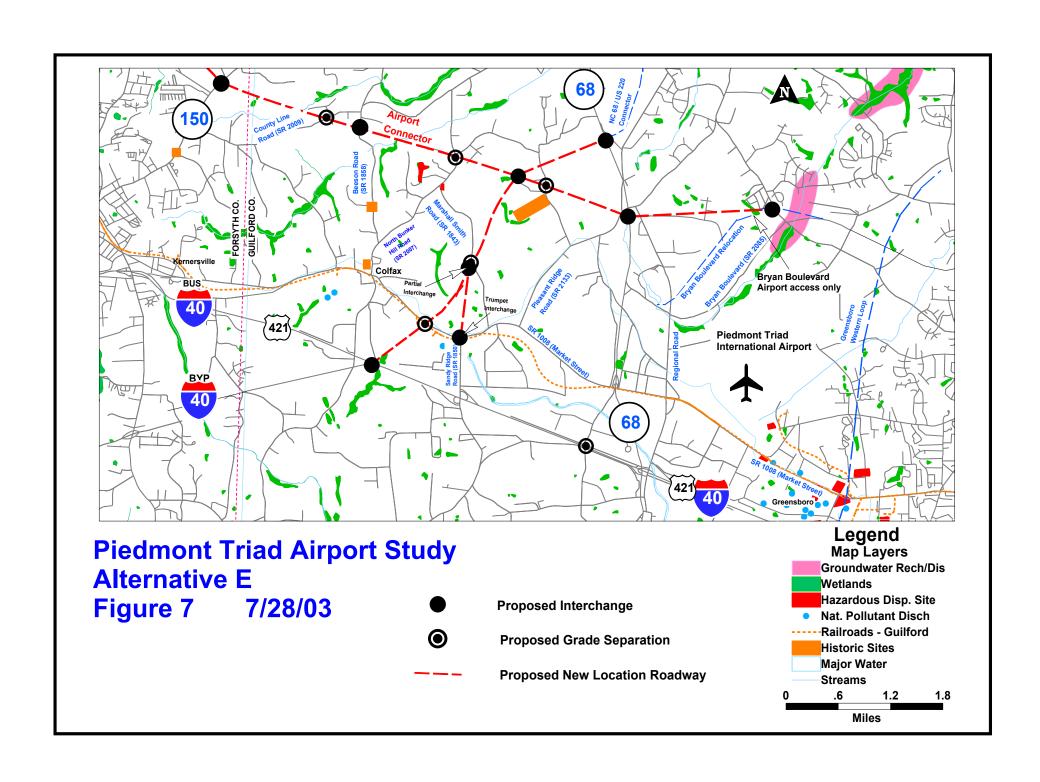
- □ Would require "cutting off" the relocated Bryan Boulevard.
- Most new location length of all alternatives (see Chapter 6).
- Most new interchanges of all alternatives (see Chapter 6)
- Concerns that the future I-73 corridor may be routed down I-40 Business if constructed.
- □ Effects two sides of the historical property on Cude Road (SR 2016)
- Most expensive alternative

This alternative was presented to the Airport Committee on October 26, 2000, and a concern was that it was felt that the section of the I-40 Business Extension between the Airport Connector and NC 68 was too long range. Also there were some concerns that I-73 may be routed on the I-40 Business corridor if this was constructed. See Figure 8 for a map of Alternative E.

This alternative was carried forward for more study, and labeled Alternative 1 (see Chapter 5).



Table 5 - Alternative E Roadway Recommendations				
Section	Length (mi.)	# Lanes	cross section	2025 aadt
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	10,500
Market Street Rel Airport Conn.	0.80	4	4 lane exprswy	20,200
Airport Connector				
NC 150 - Beeson Road	1.67	4	4 lane freeway	20,100
Beeson Road - I-40 Bus.Extension	1.92	4	4 lane freeway	20,100
I-40 Bus. Ext NC 68	1.37	6	6 lane freeway	55,700
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.08	4	4 lane freeway	48,700
Sandy Rd. Ext Airport Conn.	1.44	4	4 lane freeway	51,500
Airport Conn US 220/NC 68 Con.	1.37	4	4 lane freeway	14,300
I-73 Connector	1.66	6	6 lane freeway	69,200







5.7 Alternative F

This alternative is a variation of Alternative E that utilizes the relocated Bryan Boulevard.

Advantages

- Would relieve I-40 and NC 68 congestion.
- □ The trumpet interchange with Sandy Ridge Road (SR 1850) eliminates exposures to railroad traffic.
- Creates a direct movement between the NC 68 US 220 Connector and the I-40 / I-40 Business split.

Disadvantages

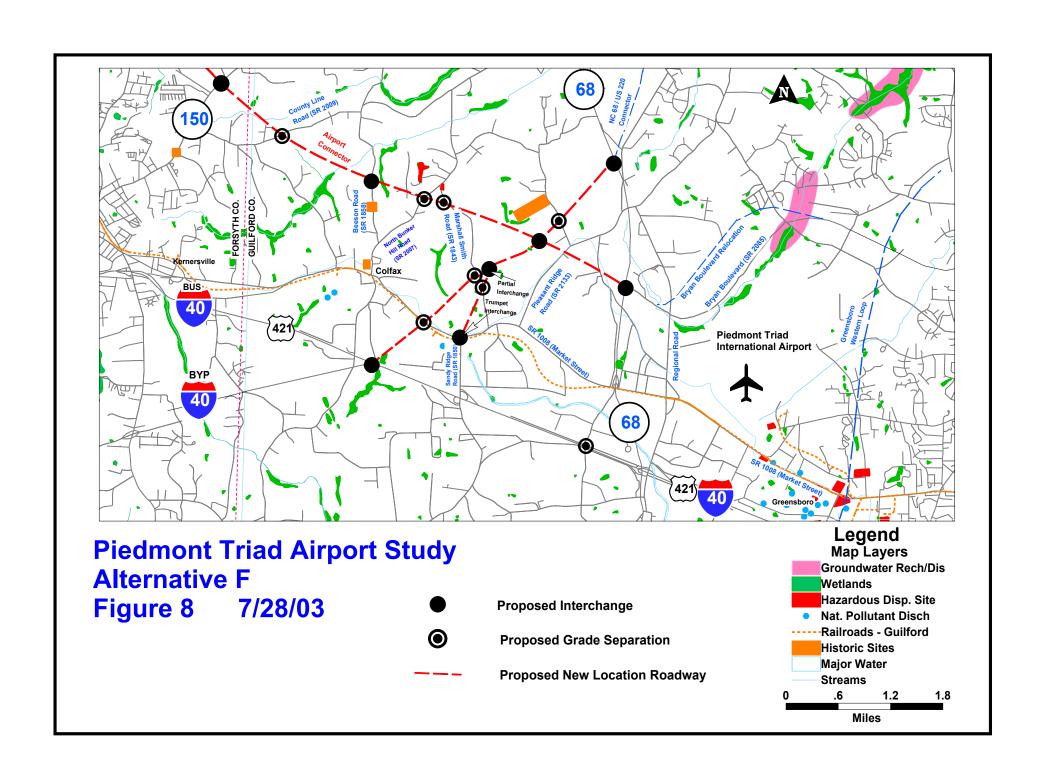
- Concerns that the future I-73 corridor may be routed down I-40 Business if constructed.
- □ Two of the interchanges on I-40 Business Extension are too close together (0.69 mile apart). Adjustments to allow for sufficient spacing are difficult because of historical sites.
- □ Requires the most grade separations of any alternative (see Chapter 6).
- □ Has substantially more historical effects with the exception of Alternative K.

This alternative was presented to the Airport Committee on October 26, 2000. This alternative was not chosen because it was felt that the section of the I-40 Business Extension between the Airport Connector and NC 68 was too long range. Also there were some concerns that I-73 may be routed on the I-40 Business corridor if this were constructed. See Figure 9 for a map of Alternative F.

Because this alternative is near two different historical sites, and two of the interchanges are too close together, this alternative was dropped.



Table 6 - Alternative F Roadway Recommendations				
Section	Length (mi.)	# Lanes	cross section	2025 aadt
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	10,500
Market Street - Airport Conn.	0.90	4	4 lane exprswy	20,200
Airport Connector				
NC 150 - Beeson Road	2.09	4	4 lane freeway	18,800
Beeson Road - I-40 Bus.Extension	2.05	4	4 lane freeway	18,800
I-40 Bus. Ext NC 68	1.16	6	6 lane freeway	44,700
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.75	4	4 lane freeway	48,900
Sandy Rd. Ext Airport Conn.	0.69	4	4 lane freeway	46,700
Airport Conn US 220/NC 68 Con.	1.26	4	4 lane freeway	17,300
I-73 Connector	1.66	6	6 lane freeway	69,200







5.8 Alternative G

This alternative takes the Airport Connector and brings it into Sandy Ridge Road and was one of the original ideas of the committee.

Advantages

- Would relieve I-40 and NC 68 congestion.
- □ The trumpet interchange with Sandy Ridge Road (SR 1850) eliminates exposures to railroad traffic.

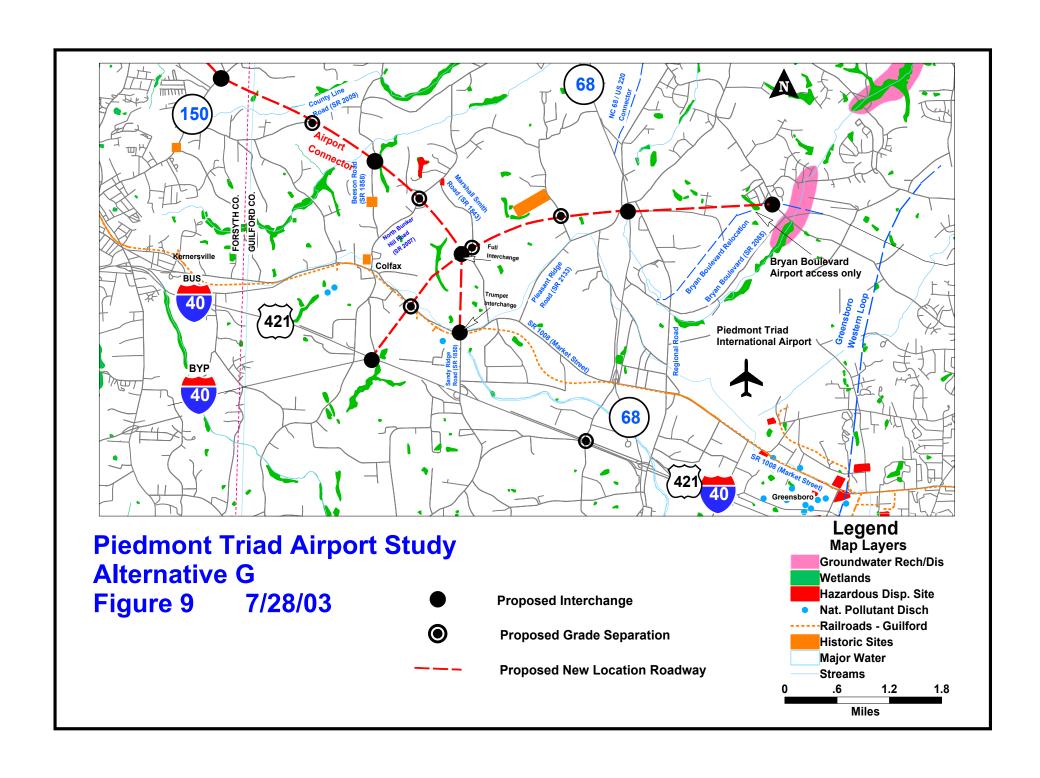
Disadvantages

- Concerns that the future I-73 corridor may be routed down I-40 Business if constructed.
- □ Tied for second highest wetland impacts.
- Impacts two different historic sites.
- □ Two interchanges less than one mile apart (0.93 mi.)

Since this alternative gives the most direct move from the I-40 / Business I-40 Split to the Greensboro Loop, this alternative was carried forward for further study, and called Alternative 2. After some modifications, specifically with interchange spacing, this alternative was recommended by the committee (see Chapter 5).

Table 7 - Alternative G Roadway Recommendations				
Section	Length (mi.)	# Lanes	cross section	2025 aadt
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	12,100
Market Street - I-40 Bus. Ext.	0.93	4	4 lane freeway	28,800
Airport Connector				
NC 150 - Beeson Road	2.01	4	4 lane freeway	22,200
Beeson Road - I-40 Bus.Extension	1.45	4	4 lane freeway	22,200
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.59	4	4 lane freeway	49,300
Sandy Rd. Ext NC 68	1.99	4	6 lane freeway	60,700
I-73 Connector	1.66	6	6 lane freeway	67,600









5.9 Alternative H

This alternative is a variation of Alternative G that connects to the existing Bryan Boulevard, but does not provide a through movement in the area.

Advantages

- □ Would relieve I-40 and NC 68 congestion.
- □ The trumpet interchange with Sandy Ridge Road (SR 1850) eliminates exposures to railroad traffic.
- Second shortest new location alternative.

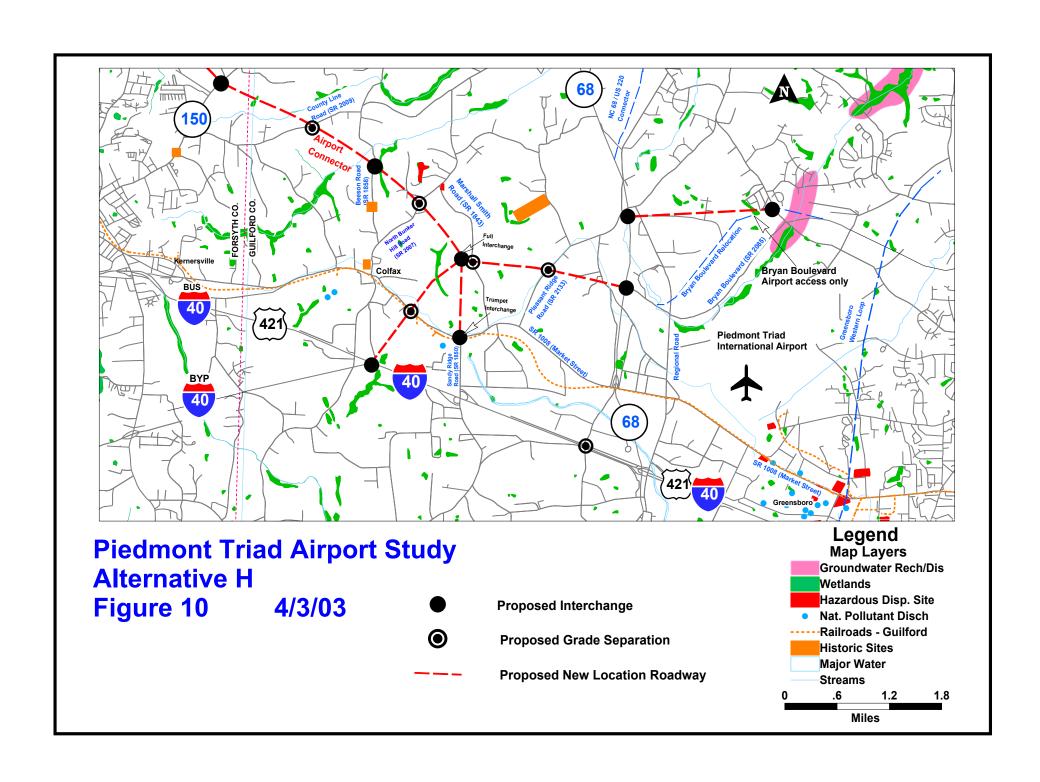
Disadvantages

- Through movement from I-40 / Business 40 split to northern Greensboro is awkward, requiring turns, and is not smooth.
- Requires widening of NC 68.

Due to the awkward movement created, this alternative was dropped. See Figure 10 for the location of Alternative H.

Table 8 - Alternative H Roadway Recommendations				
Section	Length (mi.)	# Lanes	cross section	2025 ADT
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	10,800
Market Street - I-40 Bus. Ext.	0.93	4	4 lane freeway	22,300
Airport Connector				
NC 150 - Beeson Road	2.01	4	4 lane freeway	19,700
Beeson Road - I-40 Bus.Extension	1.45	4	4 lane freeway	19,700
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.61	4	4 lane freeway	44,300
Sandy Rd. Ext NC 68	1.96	4	6 lane freeway	45,600
NC 68				
Bryan Blvd I-73 Connector	0.82	6	6 lane freeway	79,500
I-73 Connector	1.66	6	6 lane freeway	58,800









5.10 Alternative I

This alternative was introduced at an Airport committee on May 16, 2002 to eliminate the two separate interchange ideas on NC 68 (Alternatives E and F). This alternative pulls northward and creates one five legged interchange at NC 68.

Advantages

- Would relieve I-40 and NC 68 congestion.
- □ The trumpet interchange with Sandy Ridge Road (SR 1850) eliminates exposures to railroad traffic.

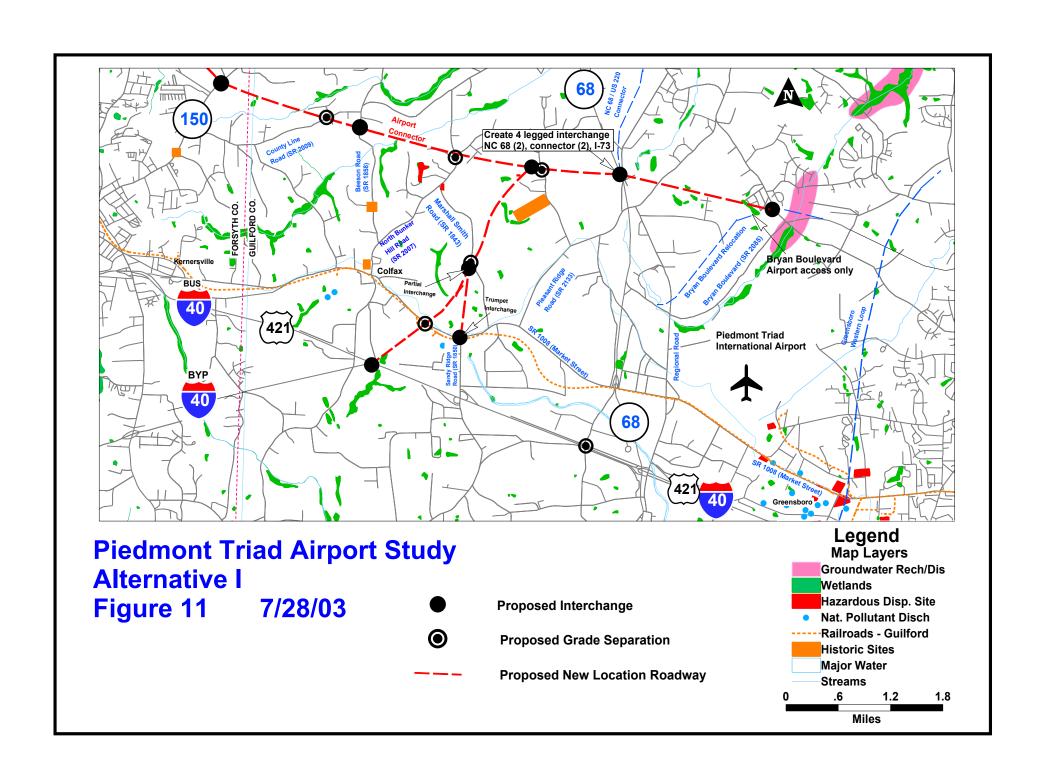
Disadvantages

- Creates a costly 5 legged interchange with two movements of the airport connector, NC 68/US 220 Connector, and two movements of NC 68.
- More northern than any of the other alternatives.
- Second highest on new alternative length of any of the other alternatives (see Chapter 6).

See Figure 13 for Alternative I. This alternative was carried forward for further study and called Alternative 3 (see Chapter 5).

Table 9 - Alternative I Roadway Recommendations				
Section	Length (mi.)	# Lanes	cross section	2025 aadt
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	10,000
Market Street - I-40 Bus. Ext.	0.93	4	4 lane exprsway	15,500
Airport Connector				
NC 150 - Beeson Road	1.67	4	4 lane freeway	18,700
Beeson Road - I-40 Bus.Extension	2.04	4	4 lane freeway	18,700
I-40 Bus Extension - NC 68	1.00	4	6 lane freeway	58,300
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.62	4	4 lane freeway	47,100
Sandy Rd. Ext NC 68	1.4	4	4 lane freeway	43,100
I-73 Connector	1.66	6	6 lane freeway	64,700









5.11 Alternative J

This alternative is a variation of Alternative G that does not have the trumpet interchange with Sandy Ridge Road (SR 1850) and Market Street (SR 1008).

Advantages

□ Would relieve I-40 and NC 68 congestion.

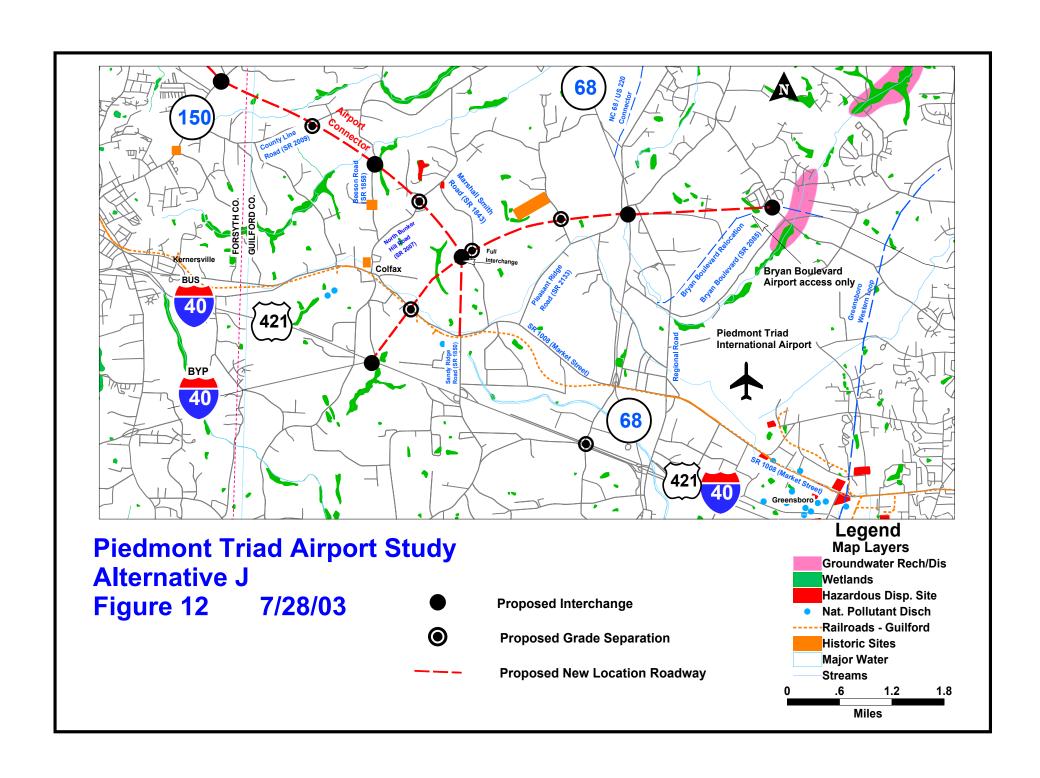
Disadvantages

□ Sandy Ridge Road (SR 1850) continues to have exposures to railroad traffic.

Due to the elimination of the interchange with Sandy Ridge Road (SR 1850) and Market Street (SR 1008), Alternative G would be more practical. This alternative was dropped.

Table 10 - Alternative J Roadway Recommendations				
Section	Length (mi.)	# Lanes	cross section	2025 aadt
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	11,800
Market Street - I-40 Bus. Ext.	0.93	4	4 lane freeway	24,400
Airport Connector				
NC 150 - Beeson Road	2.01	4	4 lane freeway	20,600
Beeson Road - I-40 Bus.Extension	1.45	4	4 lane freeway	20,600
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.59	4	6 lane freeway	49,100
Sandy Rd. Ext NC 68	1.99	4	6 lane freeway	50,000
I-73 Connector	1.66	6	6 lane freeway	67,600









5.12 Alternative K

This alternative was submitted by the Greensboro Department of Transportation on June 6, 2002. The alignment submitted was modified to avoid a direct impact to the historic property on Cude Road (SR 2016).

Advantages

- Would relieve I-40 and NC 68 congestion.
- □ The trumpet interchange with Sandy Ridge Road (SR 1850) eliminates exposures to railroad traffic.

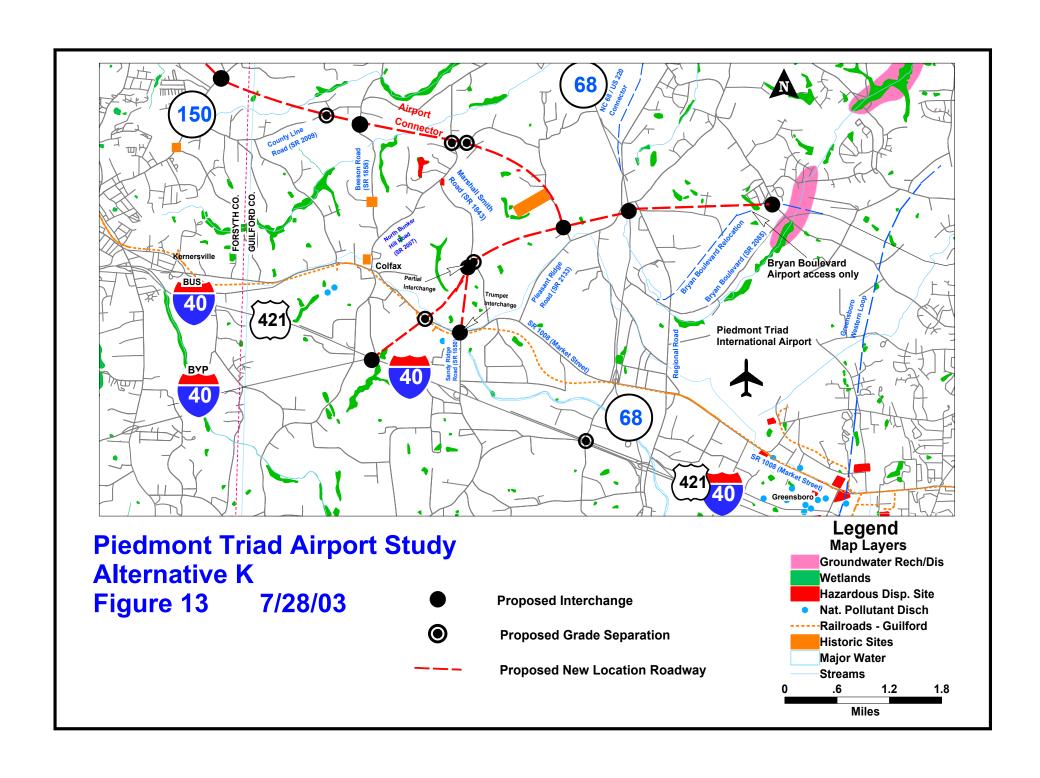
Disadvantages

- This alternative has the most direct impact to the historic property on Cude Road (SR 2016).
- □ To avoid the historic property and create an interchange with I-40 Business Extension, two interchanges were created that were less than one mile apart (0.79 mile).

This alternative, as shown, has high environmental impacts and was dropped. See Figure 13 for Alternative K.

Table 11 - Alternativ	∕e K Roadw	ay Reco	mmendations	
Section	Length (mi.)	# Lanes	cross section	2025 ADT
Sandy Ridge Road (SR 1850)				
I-40 - Market Street	0.71	3	3 lane urban	9,600
Market Street - I-40 Bus. Ext.	0.77	4	4 lane exprsway	18,300
Airport Connector				
NC 150 - Beeson Road	1.70	4	4 lane freeway	18,500
Beeson Road - I-40 Bus.Extension	2.83	4	4 lane freeway	18,500
I-40 Business Extension				
I-40 - Sandy Ridge Road Ext.	1.55	4	6 lane freeway	56,500
Sandy Rd. Ext Airport Conn.	1.19	4	6 lane freeway	50,000
Airport Conn NC 68	0.79	4	6 lane freeway	67,100
I-73 Connector	1.66	6	6 lane freeway	70,300









5.13 Alternative L

The Greensboro Department of Transportation submitted this alternative at the Piedmont Triad Area Airport Study meeting on July 24, 2002. The alignment is just a variation of Alternative G, changing the tie-in with NC 68 to the Bryan Boulevard / NC 68 intersection.

Advantages

- Would relieve I-40 and NC 68 congestion.
- Maximizes existing roadway capacity.
- Less environmental impacts than other alternatives

Disadvantages

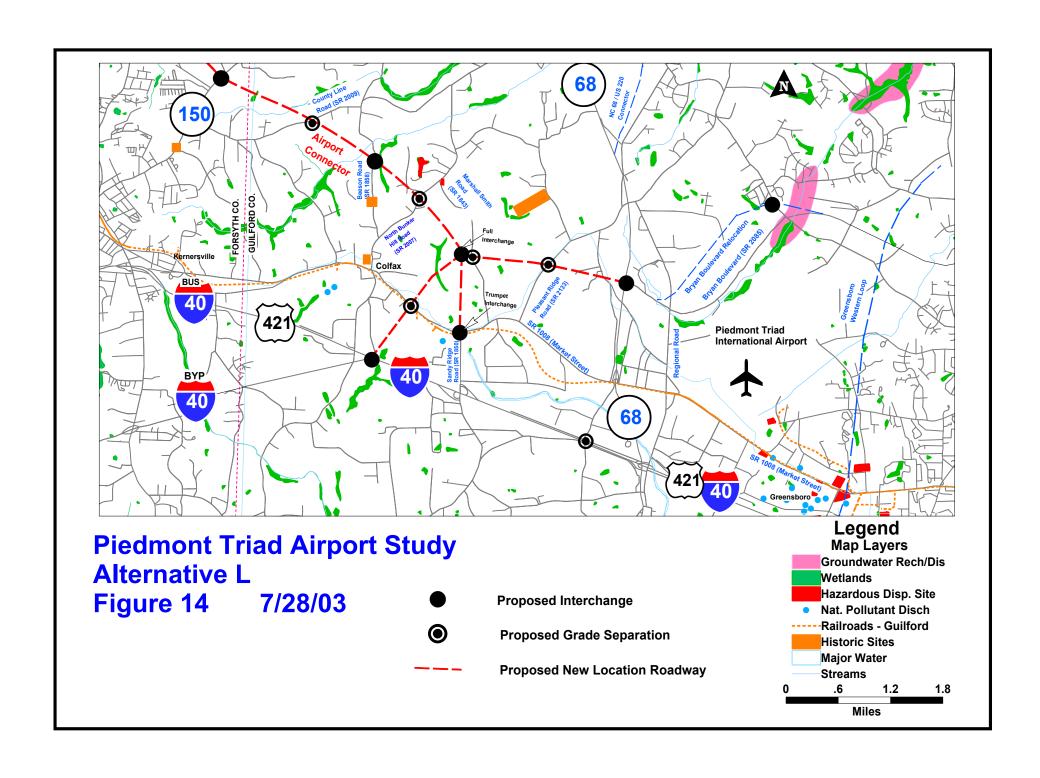
- Would require a flatter curve on the existing Bryan Boulevard location and would require widening the existing Bryan Boulevard.
- Requires I-73 traffic a non-direct route to go to the Greensboro Outer Loop

See Figure 15 for Alternative L. This alternative was carried forward for future study, and was called Alternative 4. See Figure 14 for Alternative L.

Table 12 - Alternative L Roadway Recommendations								
Section	Length (mi.)	# Lanes	cross section	2025 aadt				
Sandy Ridge Road (SR 1850)								
I-40 - Market Street	0.71	3	3 lane urban	15,100				
Market Street - I-40 Bus. Ext.	0.93	4	4 lane freeway	22,900				
Airport Connector								
NC 150 - Beeson Road	2.01	4	4 lane freeway	21,000				
Beeson Road - I-40 Bus.Extension	1.45	4	4 lane freeway	21,000				
1-40 Bus. Extension - Bryan Blvd	1.91	4	4 lane freeway	46,300				
I-40 Business Extension								
I-40 - Sandy Ridge Road Ext.	1.59	4	4 lane freeway	49,300				



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Chapter 6– FINAL ALTERNATIVES

6.1 Alternatives For Public Review

After the 12 Alternatives detailed in Chapter 4 were narrowed down to four, further study and "tweaking" began of the alignments. The meeting to discuss all of the remaining alternatives was held on October 2, 2002. The committee decided to present to the



public four alternatives: E, G, I, and L (discussed below) and the no-build scenario. The other alternatives were dropped, and were not studied further.

For the purposes of further study, the 4 alternatives mentioned above were renamed:

- □ Alternative E was renamed Alternative 1
- Alternative G was renamed Alternative 2
- Alternative I was renamed Alternative 3
- Alternative L was renamed Alternative 4

Specific changes that were made in the alignments were to minimize socioeconomic and environmental impacts, and to provide for at least one mile spacing between interchanges. For the purposes of minimization, aerial photography (from May, 2002) was used, and is shown in the subsequent figures. Traffic models were not rerun and were assumed to be the same since any corridor adjustments were minor. All alternatives would improve public transportation opportunities in the immediate area.

The public meeting was held on November 14, 2002, and a summary of the findings can be found in Chapter 7.

Alternative 2 was chosen (Figure 16). This alternative was adopted as part of the thoroughfare plan update. The other alternatives are shown in Figures 15, 17, and 18.



6.2 Discussion of Final Alternatives

Alternative 1 (see Figure 15) had the most new location freeway sections of any of the alternatives. Some felt that the new location section between the Airport Connector and the NC 68 / US 220 Connector was too long range. Also, the major traffic movement between the I-40 / I-40 Business split to NC 68 was not given priority. Due to the expense and lack of support, this alternative was dropped at a January 10, 2003 committee meeting. The preliminary cost estimate for this alternative is \$228,000,000.

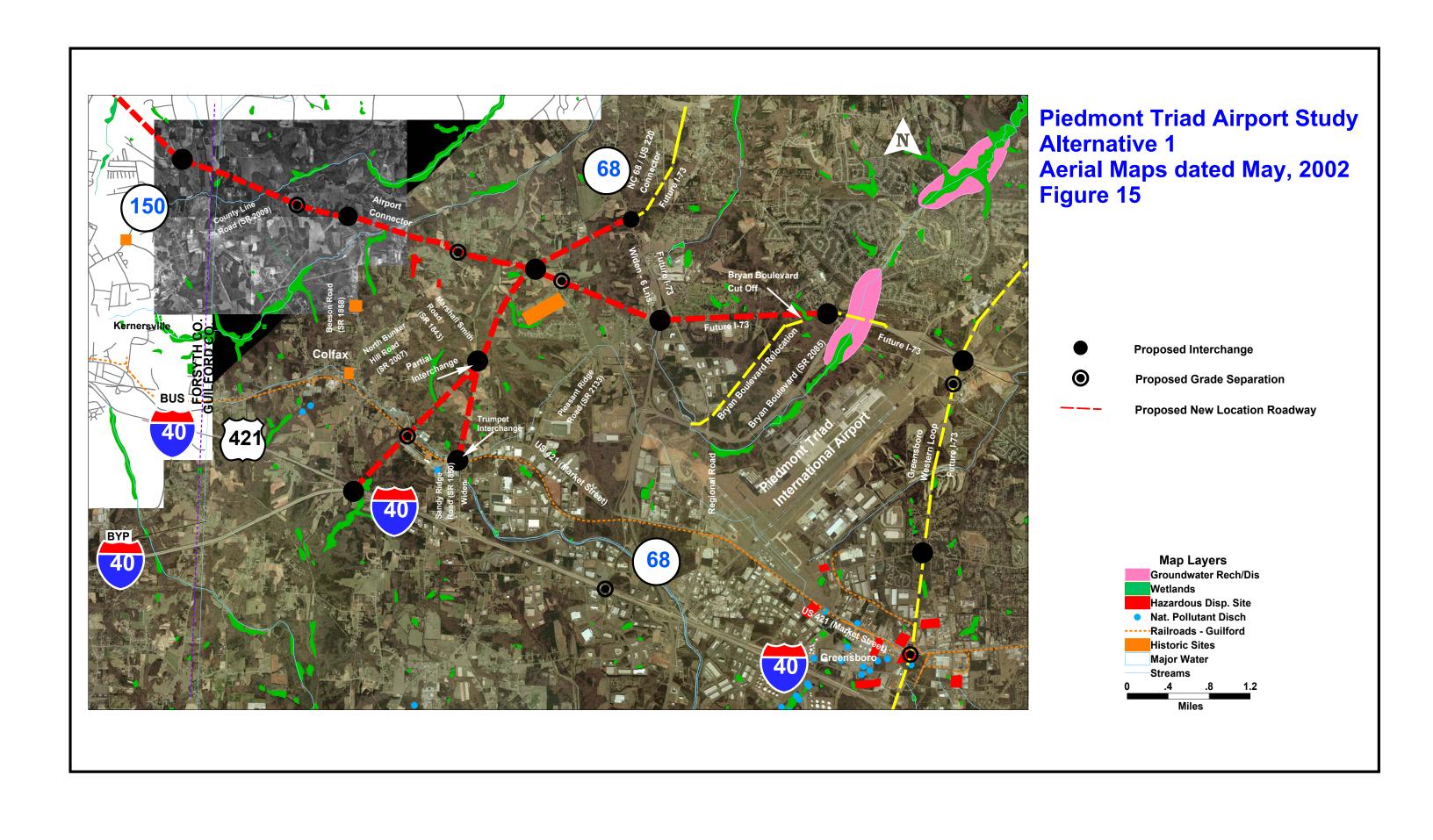
Alternative 3 (see Figure 17) was the northern most of all the alternatives. This alternative gives priority to the Forsyth to northern Greensboro Loop movement at the sacrifice of the I-40 / I-40 Business split to NC 68 movement. This alternative would make travel more difficult for High Point residents using Sandy Ridge Road to travel to the airport. After careful discussion, this alternative was dropped. It was also discovered at a later date that the size of the interchange at NC 68 would impact an apartment complex with approximately 220 units. The preliminary cost estimate for this alternative is \$207,000,000.

Alternative 4 (see Figure 18) brings the airport connector into Bryan Boulevard at the existing location. Although preferred by many, this alternative would create an awkward movement for I-73 traffic as the I-73 connector (between NC 68 and Bryan Boulevard) would not be constructed. This alternative would also require major upgrades to existing NC 68 and the Bryan Boulevard relocation project. After careful discussion, this alternative was dropped. The preliminary cost estimate for this alternative is \$198,000,000.

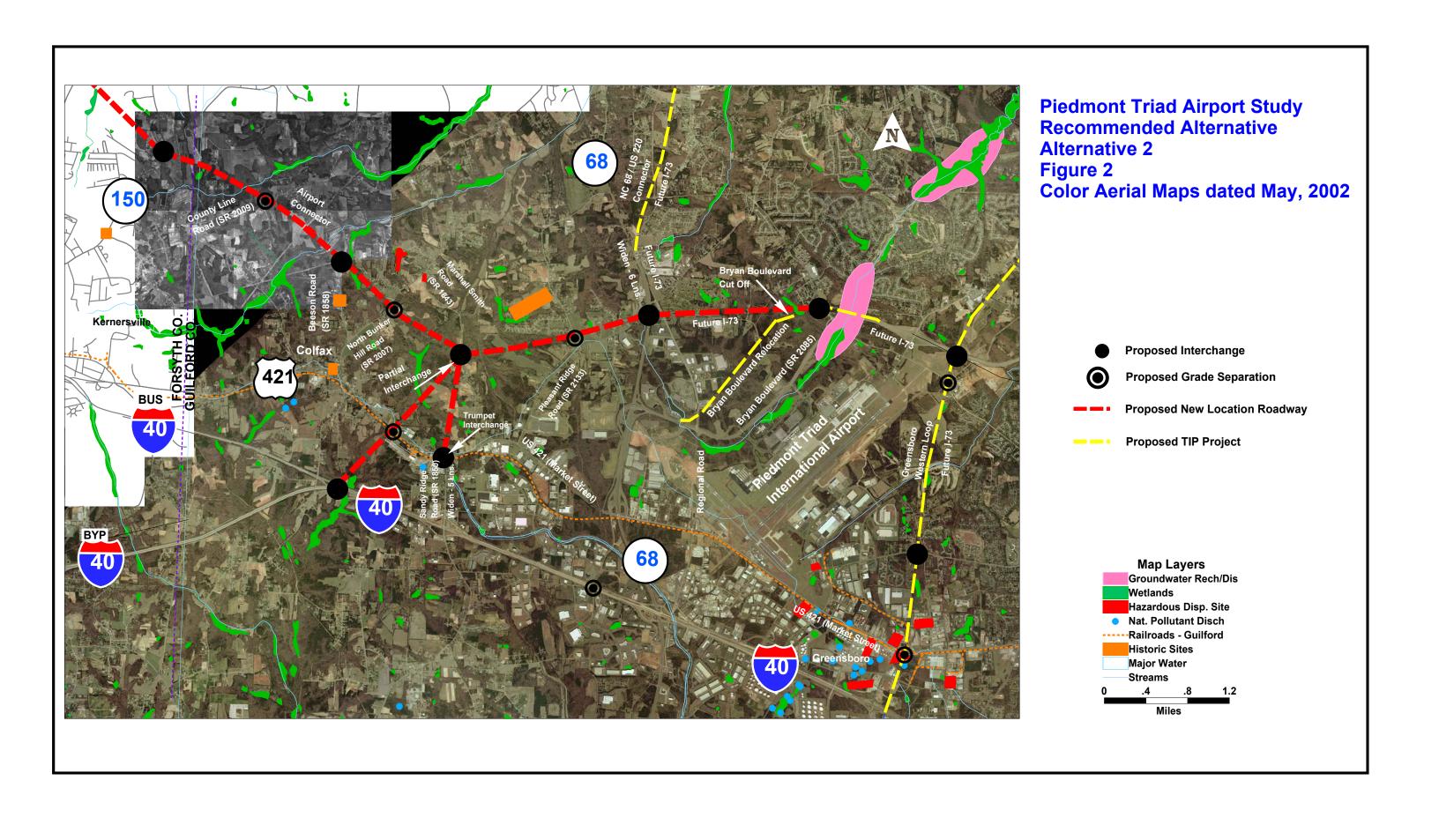
After careful review of the objectives of the study, considering public feedback, and gauging local desire, Alternative 2 (see Figure 16) was chosen as the recommended alternative.

Alternative 2 met the purposes of the study and accomplished those objectives in the most effective manner for the surrounding region. Also, the major traffic movement between the I-40 / I-40 Business split to NC 68 was given priority. The cost of the project (\$190,000,000) was also the lowest of the alternatives.

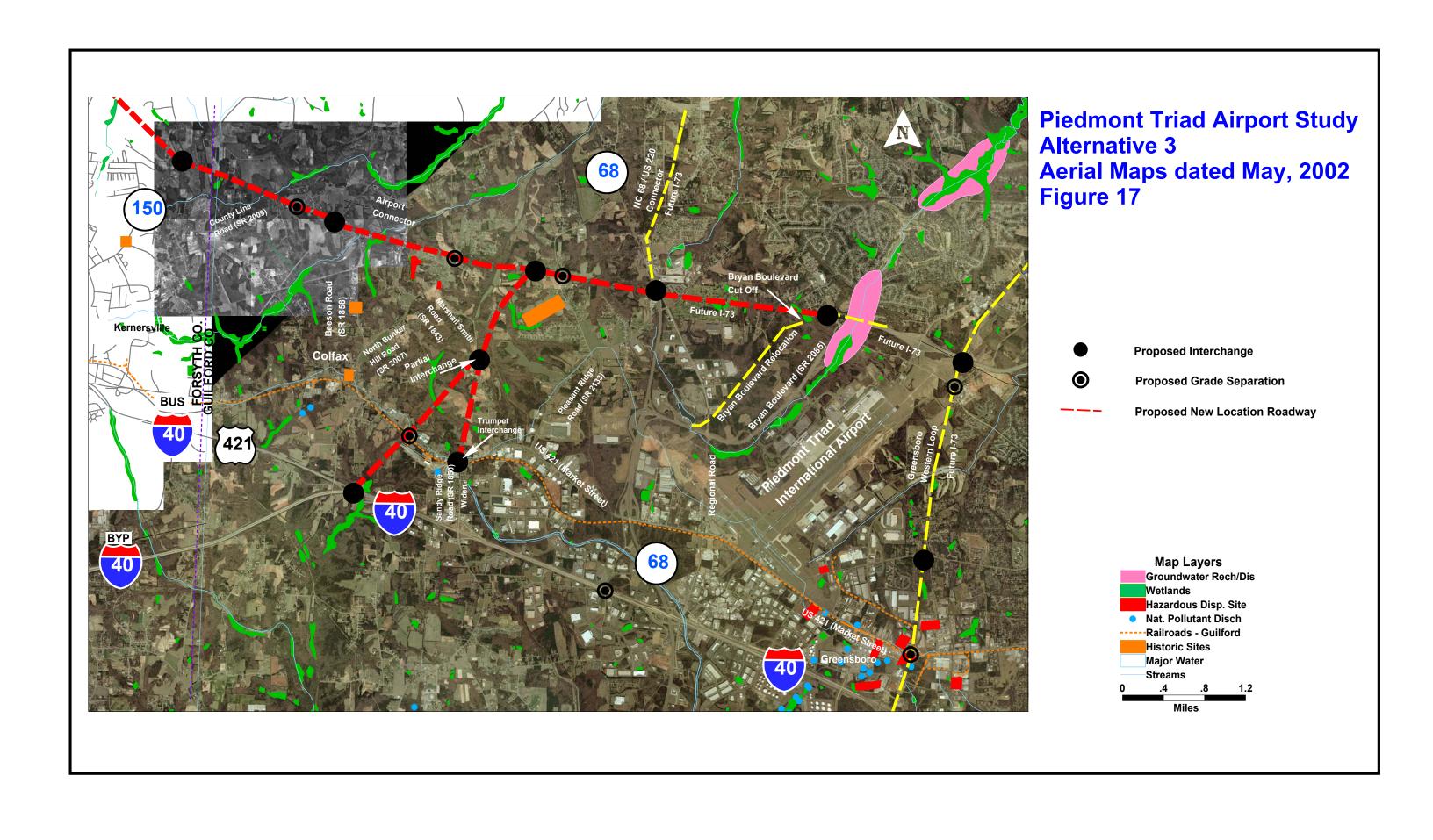
Alternative 2 was presented to the Greensboro MPO Transportation Coordinating Committee (TCC) and Transportation Advisory Committee (TAC) on May 28, 2003, and the corresponding thoroughfare plan amendments were adopted. The North Carolina Department of Transportation adopted the thoroughfare plan amendments on August 7, 2003.



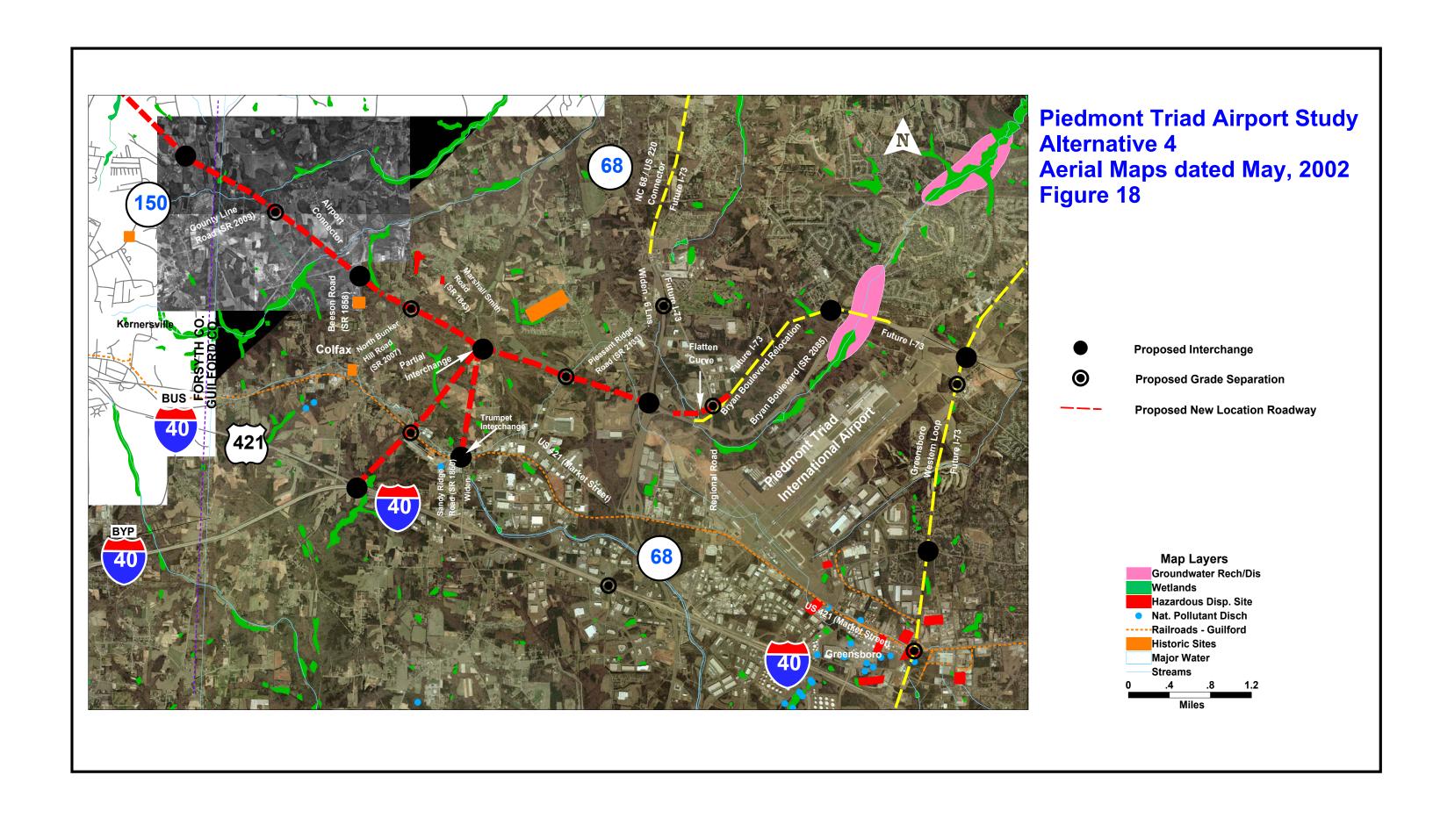
















Chapter 7- ENVIRONMENTAL AND SOCIAL FACTORS

7.1 Consideration of Environmental/Social Factors

In the past several years, environmental considerations associated with highway construction have come to the forefront of the planning process. The legislation that dictates the necessary procedures regarding environmental impacts is the National Environmental Policy Act. Section 102 of this act requires the execution of an environmental impact statement, or EIS, for road



projects that have a significant impact on the environment. Included in an EIS would be the project's impact on wetlands, water quality, historic properties, wildlife, and public lands. While this report does not cover the environmental concerns in as much detail as an EIS would, preliminary research was done on several of these factors and is included below.

7.2 Wetlands

In general terms, wetlands are lands where saturation with water is the dominant factor in determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The single feature that most wetlands share is soil or substrata that is at least periodically saturated with or covered by water. Water creates severe physiological problems for all plants and animals except those that are adapted for life in it or in saturated soil.

Wetlands are crucial ecosystems in our environment. They help regulate and maintain the hydrology of our rivers, lakes, and streams by slowly storing and releasing floodwaters. They help maintain the quality of our water by storing nutrients, reducing sediment loads, and reducing erosion. They are also critical to fish and wildlife populations. Wetlands provide an important habitat for about one third of the plant and animal species that are federally listed as threatened or endangered.

In this study, the impacts to wetlands were determined using the National Wetlands Inventory Mapping, available from the U. S. Fish and Wildlife Service.

Wetland impacts have been avoided or minimized to the greatest extent possible while preserving the integrity of the transportation plan.

Wetlands are shown on Figures 15-18 to show the relation with proposed roadways in the final alternatives 1-4.



7.3 Threatened and Endangered Species

A preliminary review of the Federally Listed Threatened and Endangered Species within the Piedmont Triad Airport area was done to determine the effects that new corridors could have on the wildlife. These species were identified using mapping from the North Carolina Department of Environment and Natural Resources.

The Threatened and Endangered Species Act of 1973 allows the U. S. Fish and Wildlife Service to impose measures on the Department of Transportation to mitigate the environmental impacts of a road project on endangered plants and animals and critical wildlife habitats. By locating rare species in the planning stage of road construction, we are able to avoid or minimize these impacts.

No threatened and endangered species are anticipated to be adversely impacted by any of the thoroughfare plan recommendations.

A detailed field investigation is recommended prior to construction of any highway project in this area.

7.4 Historic Sites

The location of historic sites in the Piedmont Triad Airport Area was investigated to determine the possible impacts of the various projects studied. The federal government has issued guidelines requiring all State Transportation Departments to make special efforts to preserve historic sites. In addition, the State of North Carolina has issued its own guidelines for the preservation of historic sites. These two pieces of legislation are described below:

- National Historic Preservation Act Section 106 of this act requires the Department of Transportation to identify historic properties listed in the National Register of Historic Places and properties eligible to be listed. The DOT must consider the impacts of its road projects on these properties and consult with the Federal Advisory Council on Historic Preservation.
- NC General Statute 121-12(a) This statute requires the DOT to identify historic properties listed on the National Register, but not necessarily those eligible to be listed. DOT must consider impacts and consult with the North Carolina Historical Commission, but it is not bound by their recommendations.

Care should be taken to make certain that all historic sites and natural settings are preserved. Therefore, a closer study should be done in regard to the local historic sites prior to the construction of any proposal.

Figures 15-18 show the Airport Area Environmental Data for the area surrounding the proposed projects. It appears there are no direct impacts to historical sites with any of the airport study projects. However, the proximity of all the alternatives to historical sites is of concern.



Several properties were listed in the study area with historic significance. Two of the properties, one near Colfax and another off Beeson Road (SR1850) were not near many of the proposed alternatives. Both of these properties are shown on mapping for all the alternatives.

One property, however, the Shaw-Cude House, off Cude Road (SR 2016), was very close to many of the alternatives. The Shaw-Cude House was listed in the National Register in 1984, and is locally landmarked. The house stands on a 280 acre tract granted by the State of North Carolina to Joseph Stanley in 1788 and purchased by Benjamin Shaw in 1789. The house is built in two sections – a one and a half story single-pen log structure built between 1790 and 1800, and a two and a half story brick block built around 1809. The roof form of the log section may be unique to Guilford County. The house is architecturally distinguished by its Flemish bond brickwork with glazed headers and vertical proportions. The house was constructed by Quakers and reflects the decline of Quakerism in the North Carolina Piedmont during the late 18th and 19th centuries (information provided by the N.C. State Historic Preservation Office). The location of this property is shown on the maps Alternatives A-L as an historic site off of Cude Road (SR 2016) (See Figures 3-14).

7.5 Noise Analysis Results

Most of the noise sensitive sites located within the airport area caused by any of the proposed alternatives are mostly single family homes, which are identified by the FHWA Noise Abatement Criteria as 67 dBA. For the purposes of this systems level study, it was assumed that a contour of 350 feet from the centerline of the proposed corridors would experience a noise level of 66 dBA or higher. Therefore, all activity land uses within the 66 dBA noise contour are considered for this study to be noise sensitive sites.

Because of the proximity to I-40 and NC 68, several sections of the proposed roads are already experiencing high noise levels. Also, sections of the proposed roads near the airport are experiencing high noise levels from air traffic that will increase when the Fed Ex facility opens. There are no highly sensitive areas (hospitals, rest homes, etc.) in the study area. Prior to construction, a noise analysis will be conducted to determine if noise walls are needed.

Although some areas may already have some roadway noise, all new location facilities are assumed to not have roadway noise prior to construction for estimation of possible impacts.

No detailed noise analysis has been made. The assumptions outlined above are to develop estimates of substantial increases of noise.



ENVIRONMENTAL TABLE FOR INITIAL ALTERNATIVES												
					OCCUR	ANCES F	PER ALT	ERNATIV	Æ			
	ALT. A	ALT. B	ALT. C	ALT. D	ALT. E	ALT. F	ALT. G	ALT. H	ALT. I	ALT. J	ALT. K	ALT. L
PROJECT FACTORS												
Mainline New Location Length - miles ¹	7.56	8.37	9.53	9.89	11.31	9.90	9.63	7.96	10.35	9.63	10.49	7.94
Number of new interchanges	3	5	5	5	7	6	5	5	6	4	6	5
Number of rebuilt interchanges ²	1	2	1	2	2	2	2	3	2	2	2	1
Number of grade separations (roadway)	4	4	5	7	6	8	6	6	6	6	6	5
Railroad Crossings At-grade ³	1	0	0	0	0	0	0	0	0	1	0	0
Railroad Crossings Grade Separated ³	0	2	1	2	2	2	2	2	2	1	2	2
SOCIOECONOMIC FACTORS												
Schools Impacted	0	0	0	0	0	0	0	0	0	0	0	0
Parks Impacted	0	0	0	0	0	0	0	0	0	0	0	0
INFRASTRUCTURE												
Transmission Line Crossings	2	2	2	2	2	2	2	2	2	2	2	2
Gas Line Crossings	0	0	0	0	0	0	0	0	0	0	0	0
Water Line Crossings	0	0	0	0	0	0	0	0	0	0	0	0
CULTURAL RESOURCE FACTORS												
Roads Effecting Historic Properties	1	1	1	1	2	3	2	1	2	2	1	1
Direct Impacts to Historic Properties	0	0	0	0	0	0	0	0	0	0	0	0
NATURAL RESOURCE FACTORS												
Stream Crossings	3	5	6	6	5	6	5	6	5	5	5	5
High Quality Wetlands Impacted (acres)	0	0	0	0	0	0	0	0	0	0	0	0
Total Wetlands Impacted (acres)	2.9	2.9	2.9	8.2	5.9	5.6	7.2	7.2	3.8	7.2	3.8	
Surface Waters ⁵	0	0	0	0	0	0	0	0	0	0	0	0
PHYSICAL FACTORS												
Critical Watershed (acres)	0	0	0	0	0	0	0	0	0	0	0	0
Protected Watershed (acres)	274.9	304.3	346.5	359.6	411.2	360.0	350.1	289.4	376.3	350.1	381.4	288.7
Hazardous Materials Sites ⁶	0	0	0	0	0	0	0	0	0	0	0	0

Notes: Unless otherwise noted, estimates of impacts based on 300 foot corridor (estimated right of way limits)

¹ Lengths are approximate. Mainline lengths include all new location corridors in the alternative

² Rebuilt interchanges are those that would need to be reconstructed to accommodate a new or additional traffic

³ Includes improvements Sandy Ridge Road (SR 1850), except. Alt. A

 $^{^{\}rm 5}$ Includes ponds and lakes, includes entire pond acreage if pond is anticipated to be drained

⁶ Impacts include superfund points and sites, groundwater incidents, and hazardous waste facilities



COMPARISON MATRIX

CHARACTERISTICS AND ESTIMATED IMPACTS

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
PROJECT FACTORS				
Mainline New Location Length - miles ¹	11.50	9.80	10.41	8.69
Number of new interchanges	7	5	6	4
Number of rebuilt interchanges ²	2	2	2	2
Number of grade separations (roadway)	5	5	5	7
Railroad Crossings At-grade ³	0	0	0	0
Railroad Crossings Grade Separated ³	1	1	1	1
Estimated Cost (\$Millions)	228.7	189.6	206.5	197.7
SOCIOECONOMIC FACTORS				
Residential Relocations	24	27	29	13
Apartment Relocations	0	0	220	0
Business Relocations	4	4	8	4
Schools Impacted	0	0	0	0
Parks Impacted	0	0	0	0
Churches Displaced	1	1	1	1
Receptors Impacted By Noise 4	43	22	34	24
INFRASTRUCTURE				
Transmission Line Crossings	2	2	2	2
Gas Line Crossings	n/a	n/a	n/a	n/a
Water Line Crossings	n/a	n/a	n/a	n/a
CULTURAL RESOURCE FACTORS				
Historic Properties Impacts	medium	low	medium	low
Direct Impacts to Historic Properties	0	0	0	0
NATURAL RECOURCE FACTORS				
NATURAL RESOURCE FACTORS	6	-	4	6
Stream Crossings High Quality Wetlands Impacted (acres)	6	5	0	6 0
Total Wetlands Impacted (acres)	2.7	4.7	7.9	4.0
Surface Waters ⁵	0	0	0	14.6
Surface waters	0	0	0	14.0
PHYSICAL FACTORS				
Critical Watershed (acres)	0.0	0.0	0.0	0.0
Protected Watershed (acres)	418.1	356.3	378.5	316.0
Hazardous Materials Sites ⁶	0	0	0	0
OTHER FACTORS				
Traffic Movement	very good	best	very good	good / very good
Awkward I-73 Movement	no	no	no	yes

All numbers given above are estimates based on field observation and aerial photography

Notes: Unless otherwise noted, estimates of impacts based on 300 foot corridor (estimated right of way limits).

All impacts do not include existing TIP Projects (Greensboro Loop, Bryan Relocation, US 220-NC 68 Connector, etc.)

Note: This chart has been adjusted since the public drop in session to reflect the most accurate information.

¹ Lengths are approximate. Mainline lengths include all new location corridors in the alternative.

² Rebuilt interchanges are those that would need to be reconstructed to accommodate a new or additional traffic

³ Includes improvements to Sandy Ridge Road (SR 1850)

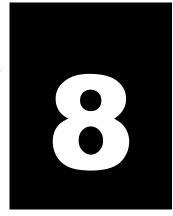


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Chapter 8 – PUBLIC INVOLVEMENT

This chapter outlines the public involvement conducted for the study and the results of that involvement. The summary of comments is presented first, and then copies of the handouts, and more specific comments given by the public. Approximately 175 people attended the November 14, 2002 drop in session.



The Public Involvement Program for the Piedmont Triad Airport Area Transportation Study was carried forward under the best

practices of the Intermodal Surface Transportation Efficiency Act (ISTEA) and the guidelines from Transportation Equity Act of the 21st Century (TEA-21) on public involvement in transportation planning and project development. Public involvement is a key component in the transportation planning in which there are potentially widespread public impacts from proposed major investments. The public's needs must be reflected in the decision making process.

The hallmarks of an effective public involvement process are best described in the Joint Planning Regulations issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to implement the planning provisions of ISTEA, and the proposed regulations for TEA-21. These tenets are:

- Proactive;
- Early and continuing;
- Complete information;
- Broad public outreach; and
- Timely public notice.

The framework for the public involvement program for this project involved two tracks. The first track focused on the identified stakeholders. The Steering Committee solicited stakeholder input through an advisory group and outreach efforts. The second track focused on the general public. Their input was solicited through open houses, newsletters, and a project database including all comments on the study.

The Piedmont Triad Airport Area Transportation Study Steering Committee has guided the overall study process. This group is composed of select representatives from the communities affected by the project. It has met regularly over the course of the study to review all technical material and critique the overall progress of the study. Brent McKinney, the Director of PART, chairs the Steering Committee.



The public involvement process as well as public input will play a large role in selecting locally preferred solutions. The following is a summary of the public involvement activities.

8.1 Stakeholder Consultation

Stakeholders' inputs were solicited primarily through the identification of the study goals and objectives from the participants of the agency representatives on the steering committee.

The Steering Committee included representatives of each the Greensboro, High Point, and Winston-Salem MPO's, Guilford County, The Piedmont Triad Airport Authority, PART and NCDOT. The purpose of the steering committee representation was to broaden the input regarding the region's transportation issues and potential solutions, and the public involvement plan. The steering committee met on a regular basis over a two and half year basis to review deliverables from the NCDOT and discuss potential alignment sets to best meet the study goals and objectives.

8.2 Public Outreach

The public outreach effort involved soliciting input and providing information on several fronts. These methods included holding open houses, creating and distributing newsletters, and preparing fact sheets to aid in the publicity.

8.3 Open House

The interactive open house framework includes many components. Display stations are set up to present project data and the progress of the study. The public goes on "self-guided tours", reviews proposed alignments on large aerial photographic displays and talks one-on-one with technical staff.

On November 14, 2002, a set of four alternative alignment sets was provided to the public for review and comment. The overall purpose of this first presentation was to provide people with an overall introduction to the study and its purpose. A comment form was developed and distributed at the meeting. The purpose of this comment form was to identify general comments and concerns among participants. The Steering Committee developed informational handouts with project information and environmental impacts for this meeting.

Approximately 175 participants submitted comment forms or written letters as a result of this meeting. The comment form used for this meeting was composed of four questions; what is the best alignment set to meet the study goals and



objectives, ranking of characteristics as it relates to the airport area (six to chose from), ranking of individual segments from the chosen alignment set, and additional comments on the alignments presented.

Participants questioned the need to develop additional roadways for the future of the area, and majority of citizen participants were split on the alignment sets to be further considered. A majority of respondents from the Winston-Salem area preferred alignment 3 which showed a more northerly route from Forsyth County to the Airport. A portion of participants favored improvement and expansion of the present road system to alleviate traffic congestion on local highways and improve air quality.

8.4 Publications

Several publications were developed to assist in publicizing the study and soliciting public feedback. These publications included print as well as webbased products.

8.4.1 Newsletters

Newsletters have been produced during the course of the study. Their publication coincides with the quarterly publications of PART and the MPO's to share project information to the general public. All newsletters include a section on how people can become involved in PART work program activities, getting on the mailing list, who to call with questions, and how to access the study website address.

The first newsletter was published and distributed in summer of 2001. Approximately, 2,500 newsletters were distributed. The newsletter provided readers with an introduction to the study.

In October 2002, the second project newsletter was published and distributed to the project mailing list of 2,500. The newsletter included an update of the Study's progress and a detailed report of upcoming public drop in session of November 14, 2002.

Besides the PART newsletters, the regions MPO's published a periodic newsletter covering all aspects of transportation within their jurisdiction. PART has also posted newsletters on its website.



8.5 Advertisement

Advertisement of public meetings associated with this study followed the public involvement policy of PART and included the paid advertisement of a minimum of nine newspaper publications throughout the region, and also included press releases for the November 14, 2002 public meeting.

8.6 Summary of Comments

Characteristics Related to Airport Area: For each characteristic the columns relate to the number of compiled choices (e.g. 8 respondents thought Improved Travel Time and Speed was the most important characteristic) (1 was most important, 6 was least important)

	1	2	3	4	5	6	NA
Improved Travel Time/Speed	8	20	28	18	12	34	53
Reduced Roadway	45	48	16	12	6	1	45
Congestion							
Economic Development	11	8	11	16	36	36	54
Improved Safety	37	24	26	18	11	6	51
I-73 Routing	4	7	19	28	35	26	53
Improved Highway Linkage	25	12	20	28	18	17	53

Individual Segment Ranking: For each segment the columns relate to the number of compiled rankings (e.g. 28 respondents feel the Forsyth Co. to the Airport segment was the most important segment) (1 was most important and 4 least important)

	1	2	3	4	NA
Forsyth Co. to Airport	28	18	18	68	45
I-40/Bus 40 to Airport	59	35	32	6	43
NC68 to US220	37	28	46	25	39
Sandy Ridge Rd. to Airport	20	50	35	27	43

1st Choice Ranking of Segments by Alternative: Compilation of respondents chosen alternative to segment (e.g. 4 respondents that feel Alt.1 should be the chosen alignment alternative also feel that the Forsyth Co. to Airport is the most important segment)



1 st Choice	Alt 1	Alt 2	Alt 3	Alt 4	No build
Forsyth Co. to Airport	4	0	33	9	1
I-40/Bus 40 to Airport	0	3	3	35	11
NC68 to US220	3	1	8	15	7
Sandy Ridge Rd. to Airport	2	2	3	9	3

8.7 Press Release

The following is the press release for the November 14, 2002 Public Meeting.

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FOR IMMEDIATE RELEASE

CONTACT:

Scott Rhine, Regional Transportation Planner Piedmont Authority for Regional Transportation

DATE:

November 8, 2002

HEADLINE:

PART is holding public drop in session

BODY:

The Piedmont Authority for Regional Transportation (PART) in concert with the NCDOT, Greensboro, High Point and Winston-Salem / Forsyth County Metropolitan Planning Organizations (MPOs), and Guilford County Planning are holding a meeting November 14, 2002 to solicit public input on alternative alignments for new roads in the Airport Area as part of the Airport Area Access Study.

The public drop in session will be between the hours of 3-7 p.m. on November 14th at the Piedmont Triad Partnership Offices, 7614 Business Park Drive, Greensboro, NC 27409. For directions to the meeting location view the meeting notice on the PART web page at www.partnc.org



The following is the Public Drop In Session handout for the Triad Airport Study

The following is the Summary Sheet that was presented to the public at the drop in session. In brief, this explained the four alternatives.

PIEDMONT TRIAD AIRPORT AREA STUDY, NOVEMBER 14, 2002

Summary Sheet



Purpose of Public Drop In Session

Gather Public Input of the 4 Alternatives Presented.

Please ask questions of staff that are present, and leave us your completed comment sheet, or return your completed comment sheet to the PART offices.

What is done with the input

All input received through the public involvement process will be carefully reviewed and considered before any final recommendations on the Piedmont Triad Airport Area Study are made. ALL COMMENTS ARE DUE BY NOVEMBER 30, 2002.

What happens after today? The Next Step.

In the near future, the Piedmont Triad Airport Area Study Committee will adopt the proposed alignment plan or possibly restudy some projects of the proposed plan based on comments received.

The proposed projects will hopefully be incorporated into the local area non-fiscally constrained Transportation Plan (formally called a thoroughfare plan).

If the Transportation Plan is mutually adopted by the local area and the Department of Transportation,

- It is **NOT** a promise to build the shown facilities
- It is NOT necessarily the final call on the location of a new road.
 When funding is supplied to the project, more in depth study is
 made on the corridor, which could cause shifts in the alignment.
 However, we feel this is the best preliminary location for the
 corridor.

These alignments will:

- provide for the orderly development of an adequate street system as land development occurs or as traffic increases
- reduce travel and transportation costs
- reduce the cost of major street improvements, mainly through the coordination with private action
- enable private interests to plan their actions, improvements, and development with full knowledge of public intent
- minimize disruption of people and businesses
- reduce environmental impacts particularly air quality, wetlands, historic sites, parks, and other publicly uses recreational areas, archeological sites, endangered species, and cohesive neighborhoods



PIEDMONT TRIAD AIRPORT AREA STUDY

PIEDMONT TRIAD PARTNERSHIP OFFICES

Piedmont Authority for Regional Transportation
North Carolina Department of Transportation
City of Greensboro
City of High Point
City of Winston-Salem
Guilford County Planning Department



Introduction

The economic and social well being of the Triad Area (which includes the Cities of Greensboro, High Point, and Winston Salem) depends upon the quality of the transportation facilities that exist in the area. If people are able to travel about freely in an area today and as the economy grows, then the transportation systems have been planned to properly accommodate existing and future travel. Well-planned transportation systems will allow for economic growth, while simultaneously providing safe and efficient travel throughout the Triad Area.

The North Carolina Department of Transportation, in coordination with the Piedmont Authority for Regional Transportation (PART), Greensboro Urban Area Metropolitan Planning Organization, High Point Urban Area Metropolitan Planning Organization, and the Winston-Salem/Forsyth County Urban Area Metropolitan Planning Organization and Guilford County Planning Department cooperatively developed the Piedmont Triad Airport Area Study.

Study Goals

- 1) future routing of I-73
- 2) relocation of Bryan Boulevard and immediate access to the airport terminal
- 3) improved access from High Point to the airport
- 4) improved access from Forsyth County to the airport
- 5) access to the airport using public transportation

This study sets forth a transportation system in the area, that will eventually become elements of the local area Thoroughfare Plans, and that will serve the anticipated traffic and land development needs for the area.

Alternatives

It should be emphasized that the recommended plan is based on anticipated growth of the urban area as indicated by current trends. Prior to construction of specific projects, a more detailed study will be required to reconsider development trends and to determine specific locations and design requirements.

Fifteen alternatives have been studied. They have been narrowed down to four alternatives for public review.



Alternative 1

This alternative investigated extending the Airport Connector on the Winston-Salem Thoroughfare Plan and connecting to Bryan Boulevard near the proposed Old Oak Ridge Road / Bryan Boulevard interchange. The proposed I-40 Business Extension would connect to the I-40 / I-40 Business split and connect to the Airport Connector and the NC 68 /220 Connector. Sandy Ridge Road (SR 1850) would be extended to the I-40 Business Extension, with a trumpet interchange at Sandy Ridge Road (SR 1850).

Alternative 2

This alternative takes the Airport Connector and brings it into Sandy Ridge Road and was one of the original ideas of the committee.

Alternative 3

This alternative was introduced at the airport area study committee on May 16, 2002 to eliminate the two separate interchange ideas on NC 68 on two previous alternatives. This alternative pulls northward and creates one five legged interchange.

Alternative 4

The alignment is a variation of Alternative 2, changing the tie-in with NC 68 to the Bryan Boulevard / NC 68 intersection.



8.8 Public Comments for the Airport Area Transportation Study

The following is a word for word compilation of the comments on the Airport Area Transportation Study (AATS) that respondents included on the public comment sheet, based on the November 14, 2002 drop in session.

#4 has the least impact on our Quail Creek neighborhood. At least 4 of homes would be destroyed by the alternate plans. Plus, the rest of the homes would be majorly affected and depreciate in value and quality of life. Our neighborhood of 86 was established only 4 years ago. We moved here for less traffic and lower taxes. If this was in the works, why grant building permits and continue to let developers build in these areas?

NC routes show the removal of a historic house being torn down. This needs to be changes and considered. Location on Marshall Smith Road, it was built in 1923.

Widen Market Street from Sandy Ridge to Bus. 40. Widen Sandy Ridge to 3 lanes from Market St. to I40 Interchange. Pleasant Ridge Rd. should link up with Bryan Blvd. Widen it from Market Street to 68. The airport is not hard to get to. The trouble is the roads mentioned.

My development is fairly new, also one close to us (Woodfield). Why were we not told this plan was coming? Thank you.

If the state leaves the roadways the way they are the state and counties could save ALL that money proposed to spent from taxpayers to be better spent elsewhere where it is REALLY needed like schools. Invest in our future.

It is disturbing that none of this was mentioned when our neighborhood was built less than 4 years ago. This has a direct impact on the quality of life and home value if any is done, but worst is #2.

My concerns are with plans 1,2,3 that would destroy homes in existing neighborhoods. If this had ever been considered by a planning commission why were these communities ever allowed to be built. It seems that Plan 4 is more economically sound as well as least destructive while still accomplishing your goals.

I believe alternatives 2 and 4 are the best because they require the least # of miles of roadway to be built. Also alternative 4 impacts the least number of receptors with noise. Alternative 4 also has least impact on wetlands. Furthermore, 2 and 4 conserve more important watershed acres.



The newness of our development established just four years ago, if you knew this was coming why did you allow this development of homes. I will be retiring soon and can not afford the loss of my home that this is going to cause.

The Quail Creek Development was established 4 years ago and I don't want this entrance way or our neighborhood to be forced from their home or the entrance way to the development to be done away with. I certainly would NOT like to see any other roadway in front of my home. If you knew this was coming why did you let us build here?

As resident of Quail Creek Development, we find alternative 4 least disruptive to our quality of life and most appealing regarding planning.

Under no circumstances do we think alternative 2 is viable. Why not use/expand present corridors of 68 and 421. This would be more advisable.

How can DOT and Guilford County allow developments to start if this plan was initiated 2 years ago. Why aren't options considered that take these roads through undeveloped commercial land? I certainly hope that developers did not influence this decision.

Understand need for roads but am deeply disappointed government let us build over 200 new homes when they knew this was coming. Really feel betrayed and hope that powers that be don't put (big) business interest ahead of residents and quality of life. We have 90 homes here. Please pass us by!

We believe that protection of existing neighborhoods as well as wetlands is also critical!!

An airport connection seems to be a major waste of roadway money when I-40 and I-40 Bus are so close to the airport.

Alternative 4 would be the most cost effective for PART. Residential areas would be less impacted by noise, prospective businesses would be in favor of relocating families to area, less social/emotional liability than other alternatives.

At least 4 of our neighbors will be forced from their homes. Quail Creek Development is 4 years old - if you knew this was coming them why did you let us build here?

If changes must be made, Alternative 4 would be my choice.

Consider efficient routing; reduce number of intersections; provide for increased traffic loads by taking more off of I-40

Not in favor of the FedEx hub in Greensboro



Alternative 4 makes the most sense. It connects with Bryan Blvd and is the shortest route requiring the fewest interchanges.

Rerouting Bryan Blvd is a waste of taxpayers dollars. Alternative 4 has least impact on homeowners, so it should be considered above others.

Alternative 4 would effect the NW residential area less than the others.

As we develop it is important to keep in mind signage for the existing businesses

The airport connector road is unnecessary. There is and will be an abundance of roads in this area.

I-40 widening should be sufficient

I feel already have I-40 and widening of this would and should be sufficient

Alternative 2 is the worst alternative on the list.

Airport connector not deemed necessary

Where are lakes Higgins and Brandt in reference to the maps?

Every time you build another road, you cause more congestion.

I do not see where any of the 4 alternatives mentioned in Question 1 are needed. I-40 expansion is plenty.

Could the interchange on Marshall Smith be moved to farm land(east) and not on houses - one of which is the family 80+ yr old home place.

In the segment of Sandy Ridge Rd. and I-40 going north, please move right-of-way west by at least several hundred yards. This would minimize damage to existing houses on Marshall-Smith Rd. The area west has almost no houses and represents relatively small changes with road alignment these land values in the west side would probably be lower that the present alignments proposed. This would eliminate interference with the potential historic sight of the 80+ year old farm house underneath the current partial interchange.

I do not like the survey form. The questions ask me for information and my thoughts about issues I don't have knowledge. I only saw the maps for Guilford County and do not know how the highway affects or runs through other counties. I see no reason for



the airport connector, since we have I-40.

2 and 4 appear to run through wetlands area at the north of the new Girl Scout Environmental Center which will be developed in 2003. The future address will be 8818 W. Market (Magnolia Manor) and 1011 Pleasant Ridge Rd. We think you could eliminate the extension of Sandy Ridge Rd to the airport connector. High Point traffic can easily access from 68 or 311N to I-40 to proposed I-40/Bus 40 to airport connector.

Alternative 4 disrupts the entire Airport Center Business Community. Major companies and employee of the triad are located here. It is one of the premier business communities in the area-the lake and wildlife create a beautiful setting-please don't destroy that.

Doubt any input will be taken into decisions. Up to now the only voices listened to are politicians and contractors. Residents are disregarded especially those who have lived in the airport area for over 30 years.

Number 4 would be the least detrimental to existing large neighborhood communities along Pleasant Ridge and Cude Road. It seems to be the least costly and least destructive to homes and wetlands. What would be left of these subdivisions after the decimation of homes entrance ways and other unforeseen obstacles? Very costly! Very destructive!

In consideration of the failure to initiate completion of any loop around central Forsyth County, it is doubtful that these airport connector would serve any purpose apart from creation of development property. It is doubtful that these connectors would serve general transportation needs outside the scope of PTI.

Alternatives 1&3 traverse the headwaters of Reedy Ford and would cause huge disruption of wetlands and gashing through the ridge between Marshall-Smith and Cude. Alternative 2 displaces property owners all along Pleasant Ridge and Cude. Alternative 4 is the only one that is feasible and cost effective.

I question the projections of increased future traffic of any significant amount from Forsyth/Surry Co. or Virginia necessitating the airport connection as conditions stand now. I would hope planning would depend on some appearance of increased commercial development before roadways are developed.

Alternative 4 is the least offensive of all choices because it effects the least amount of homeowners and their displacement. Concept unnecessary and costly for unfounded data to support the concept.



As a resident of the airport area, alternative 4 seems to be the best alternative that least disrupts residential area.

Alternatives 1,2,&3 have a needless connector to the north side of the airport and impact existing neighborhoods far too much.

Option 4 disrupts least. Protected watershed acres. Also smallest number of miles to build, less costly; airport to Winston connector not needed. Why not propose upgrade of existing I-40/Bus40 corridor will disrupt less neighborhoods.

We don't perceive any need for a Forsyth County airport connector. My wife and I both commute to Winston-Salem to work. A much better plan which limits highway sprawl would be to simply expand Business 40, especially given that these will be a Winston-Salem beltway for access.

If roads are ever built I would propose that Sandy Ridge Road and I-40 be shifted far enough west to iss houses on Marshall-Smith Rd.

If you have to build roads, I suggest alternative 1 and moving the Sandy Ridge and I-40 proposed connections west far enough to not take the houses on Marshall-Smith Rd.

We are opposed to any highway development in this area. We recently relocated to this area on the premise that the area would remain a quiet residential wooded area. According to the airport area plan issued in print on 4/3/02 the plan would not interfere with our property.

I don't have any need for any of these routes. Alternative 4 is the furthest from my home. The other 3 alternatives are right next door. Expect some protests if you go with anything but alternative 4.

You need to create more detailed maps. Question 2 doesn't have enough info. PTI doesn't have a lot of problems. Please contact everyone to be affected. Can citizens participate in the environmental study?

Rather than paving the diminishing rural agricultural land left in the county, why not use the existing I-40/NC68 corridor? In the 4 proposals, Alternative 4 seems the least impact on the communities of Quail Creek, 4 Oaks and the future one located on Ballard Rd.

I don't agree that additional highway routes will improve access to anything but I think additional lanes to the routes we have now and improved off/on ramps would benefit everyone. For instance get rid of the 360degree loopdeloop on ramps.



I can understand the need for extending Sandy Ridge Rd. and I-40 business to take some congestion off the Hwy 68 interchange. But I feel strongly that there is no need for an airport connector between Guilford and Forsyth Counties. We already have tow interstates in place to handle this traffic. If future improvements need to be made, then widen these roads that are already in place. The widening of these roads would be less intrusive and come at a much lower cost than new construction. If the airport connector must be constructed, then Alternative 4 would be the best selection due to fewer miles of new mainline location, fewer interchanges and fewer acres of protected watershed.

Stop taking farmland and drainage areas for more roads. I don't live here because of access to the airport. I live here because of the trees and land. I drive by horse farms. I don't need more road rage drivers.

I do not feel the Forsyth Co to Airport connector is needed. We should concentrate on the I-40/Bus40 route to the airport for the following reasons: much cheaper, would not disrupt properties (maple leaf, four oaks, quail creek and Woodfield communities), current infrastructure would handle the necessary traffic.

What is the purpose of this road? One would think that building the FedEx hub in this area would be enough. It appears to be the beginning of the end for residences in western GSO. Is there anyone that actually does long-range planning for GSO/Guilford Co? If so, why do communities of \$250,000 houses have a six lane highway driven through it? How much is this being driven by FedEx's need to have a rapid corridor north?

I do not believer that the Forsyth County to airport connector is needed. We should expand our current roads to handle any traffic increase. This would be cheaper and would not disrupt properties. If you still believe this road is needed, I would choose Alternative 4. Alt.4 would disrupt far fewer properties and new developments than the other alternatives.

Goals of study are not valid. Considering the vast amounts of commercial space already built and available, why develop more. I see no economic need for the completion of any of the proposed roads. I-40 and Bus40 thoroughfares should be used, expanded, completed! There may be a need to provide a better connector of I-40 and airport, but utilize 68. It is an incredible proposal to provide better roads to PTI than are at ATL Hartsfield. PTI has only 29 flights a day or is this a huge freebe for FedEx at taxpayer expense? It seems that PART has forgotten that there are reasons for living in the area other than roads and airports.

When will final decision be rendered?

I own property at 3205 Edgefield Rd.. It is part of Woodfield residential development. I would like plan 2 or 4. They would cause less impact on residences. They should be less



expensive for taxpayers.

As the developer of Four Oaks, I would like to minimize the impact of the Forsyth County connector on that subdivision as much as possible. As you are aware, the homeowners are very upset about some of these proposals. We still have several lots that could be adversely affected. Please keep me posted on any new developments.

Extending Bryan Blvd to I-73/Pleasnat Ridge Rd interchange and aligning airport connector to this interchange is critical. Extending Pegg Rd. over I-40 is important to keep local/commuter traffic off NC68. The Bus40 extension to the airport connector & I-73 is also critically important.

Limited access highway connection from Bryan Blvd to HWY311 in High Point must be addressed. It can follow the Sandy Ridge Rd/Johnson St. corridor which is relatively undeveloped at this point in time. This should keep R/W acquisition costs to a minimum. It can be implemented faster than a new Forsyth Co. connection, thereby providing faster interconnectivity and East-West redundancy as an alternative to I-40 when it becomes impossible (crashs/construction). An interconnected traffic signal system between High Point and Greensboro is needed to coordinate signal timing on HWY 68 and Wendover Ave.

An alternate route to the airport is imperative for the economic and social well being of the western Triad. I-40 will not (does not) handle the present and future traffic. We also need alternative due to traffic congestion due to crashs on I-40.

Option#1 the best, #3 next best. We want to save out new home and 11 acres. We've only been there 3 months.

We like Alternative 1 the best. Least impact on environment and housing.

Both Alternatives 1&3 go too far (not acceptable) north and disrupt established communities unnecessarily. Alternative 4 is least disruptive but does not give good connection of I-73. Alternative 2 seems to be the least disruptive while giving reasonable connection to I-73

Alternatives 1&3 are UNACCEPTABLE! Alternatives 1&3 both go too far north and would be too disruptive to established communities. Alternative 4 is the least disruptive but would make a poor connection for I-73 traveling around the airport. Alternative 2 is less disruptive than either 1 or 3 but solve the I-73 connection problem. Therefore it is the best choice.

#4 is least negative impact to overall - costs, residents, environment (critical watershed at Reedy Fork Creek)



I own 72 acres on Pleasant Ridge Rd.

Alternative 4 is shorter, less expensive, fewer interchanges, less social impact and fewer businesses and families affected by noise from new highways. Alternative 4 stays within the noise come from the runways 5/23

All options except for Alternative 4 have unacceptable impacts on neighborhoods throughout Colfax, many of which are still in the build-out stage. There will be huge costs involved in compensating homeowners. Alternative 4 confines the new road corridors to mostly industrial and undeveloped areas. It is more than adequate for moving traffic through the area.

Why would county planners be allowed to approve new subdivisions (Quail Creek Bull Run etc.) if they knew roads were planned to divide them in half or separate them?

Option 4 is most preferable as it has less impacts to noise, residential relocation costs and costs associated with interchanges and overall construction of the road. Additionally it will avoid disruption of current expansion plans that are underway in the Woodfield neighborhood. This expansion will allow the community to thrive thus furthering economic growth in this area.

Option 4 presents the lowest costs of construction (i.e. Less interchanges etc.) In addition it has less impact to noise. The neighbors of Woodfield are currently in the midst of an expansion to increase the number of homes which in thru will bring further income to the community.

Less disruption to the affected area if use existing 68-Bryan Blvd. Exchange. Alternatives 1&2 have greater socioeconomic impact than Alternatives 3&4

I feel bringing the airport connector from Winston-Salem in at the already existing Bryan Blvd./68 interchange would better serve people coming from I-40 and would create less overall disruption to the area.

Alternative 4 provides less social impact, is less costly (shorter route and fewer interchanges). Alternative 4 stays in the noise cone which already exists from RW 5/23 traffic.

Alternative 4 appears to have the least negative impact on 2 important residential communities - Woodfield and Quail Creek. Please leave these two neighborhoods intact.

Alternative 4 appears to be the most direct route and most efficient.



Alternative 4 has the least impact and disruption. Use of existing roads and routing is optimized. Improves connections and offers a more direct route from I-40 to airport.

Please send me copy of executive summary and maps of 4 options.

Alternative 4 appears to be the shortest route causing the least amount of problems. Route 4 causes the least amount of roadway construction and in terms of noise impact Route 4 is far superior to the othe alternatives. Route 4 will also enable two relatively new residential developments to continue to grow. Ridgewood Development is coming to our development only if Route 4 is chosen. Quail Creek Development will also be negatively affected by routes 1,2,3 so Route 4 is best for that growing community as well. Please send me a copy of the Executive Summary once it is available.

In reviewing the proposed plans, I believe Plan4 is the best plan. It provides the best connection with the least amount of disruption to existing developments. I live in a development that would be directly affected by Plan 2 and do not recommend it due to the construction would require houses in the development to be relocated and would destroy the qualities that I value in where I live.

Widen Sandy Ridge from Market St. to I-40. We need to improve the roads we have not build more.

Alternative 4 is my second choice. I do not feel that any of the 4 alternatives are necessary. We have Highway 40 and now bypass 40. Soon 40 in Greensboro is being widened to accommodate the traffic. There is NOT enough airport traffic coming from WS to justify a road through our beautiful neighborhoods. This is completely unnecessary!!

Why is on of the options I-40/Bus40. This is already a heavily congested area. This is the worst example of planning I've ever seen.

Alternative 4 represents the most cost effective alternative to meeting the goals. Also Alternative 4 will allow the proposed addition to the Woodfield Development to be completed, thus providing additional support to local business. Further, Alternative 4 has less watershed acreage impacted. Overall, I believer Alternative 4 provides the best manner in achieving the study goals while relatively minimizing the overall negative impact.

Alternative 4 is most cost-effective in terms of raid length and number of interchanges. With this alternative, there is less socioeconomic impact overall and less noise; it affects the fewest watershed areas (protected) and residential development in previously planned subdivisions will continue as businesses locate nearby and employees are drawn to those neighborhoods.



Summation of Letters and E-mails

Total number of letters and emails 30

Listing of businesses responding	Submitted by		<u>Title</u>
Winston-Salem / Forsyth Co. Schools Superintendent	Donald Martin		
Wake Forest Univ. Baptist Med. Cntr. President/CEO	Len B. Pleslar		
BB&T	Michael Gwyn		Senior VP
BTI	Christopher Maginn	iis	Accounts
Mgr.			
Winston-Salem Alliance	Allen Joines	Presid	
DataMax	Thomas Blair		dent/CEO
Salem Group	Brian Heelan	Partn	
S&L Painting and Decorating, Inc.	Lida Hayes-Calvert		
Frank L. Blum Construction Co.	J. Andrews Hancoc	k Presid	
LA Reynolds Garden Showcase	Gerald H. Long		Chairman
Legg Mason	Robert Northington	Resid	ent VP
Novant Health	Greg Beier		
President/CEO	Katy Poloc	Drocio	lont/CEO
Graham & Boles Properties Wells Jonkins Lucas & Jonkins PLLC	Katy Boles		lent/CEO
Wells Jenkins Lucas & Jenkins, PLLC	Mike Wells,	-	artner
Smith-Phillips Lumber & Building Supply Salem Academy and College	Mickey W. Boles Paige French		Planning Dir.
Northwestern Mutual	Royall	1	Flatifility Dif.
Winston-Salem State University	Harold L. Martin, Si	· Chan	cellor
Winston-Salem Chamber of Commerce	Gayle Anderson	Presid	
Amarr Garage Doors	Richard A. B		
Salem Computer Group	Jeff Macintosh		Partner
Salem Group	John Millican	CEO	
Horn & Stronach Marketing	Mike Horn	Partne	er
Quail Creek Resident	Terry Yeazel		Resident
The Public good	Robert Fricke	Citize	n
Concerned Citizen	Todd Harmon		Citizen
Quail Creek Resident	Jeff Agee / J	udith	Resident
Quail Creek Resident	Mr./Mrs. Gre	en	Resident
Concerned Citizen	Julie S.		Citizen
Branch Banking & Trust Company	Michael Gwyn		Senior VP
Of the 30 letters and e-mails received in response			
presented to the public the majority of these l	etters were submitte	d by bu	usiness leaders
in the region.			



There were 6 home-owners that responded in lengthy comment that were not included in the word for word summations presented above.

The general themes of the business leaders that submitted written comments are as follows:

Current congestion on I-40 warrants an alternative east-west thoroughfare connecting Winston-Salem and Greensboro.

A roadway connecting I-74 on the Winston-Salem outer loop to I-73 is critical in the economic vitality of the region.

Alternative roadways that provide access to the airport from all points of the region will provide long-term benefits to the region and the businesses that advance with the establishment of the FedEx Mid-Atlantic sorting hub.

The Airport Connector from Forsyth County needs to run parallel to I-40 as presented in alternative 3.

Having another route that travels east-west will improve safety on our current congested roadways.

Number of Completed Surveys – 154 Number of Letters or Emails - 30 Number of Households or businesses responding – 148

Gender of persons responding:

Females – 52

Males - 105

Couples – 11

Unknown - 9

Preference for Alternatives:

8 - No Choice

9 – Alternative 1

6 – Alternative 2

65 – Alternative 3

75 – Alternative 4 (includes 27 spouses)

29 – Alternative 5 (No build)

30 - Letters/Email



PUBLIC MEETING NOTICE

April 24, 4-7 p.m.
Piedmont Triad Partnership Office
7614 Business Park Dr., Greensboro, NC 27409

You are invited to attend a public meeting on April 24, 2003 at the Piedmont Triad Partnership Office for the Airport Area Transportation Study. The purpose of this meeting is to:

- overview the findings of the Airport Area Transportation Study,
- review proposed amendments to the Greensboro Urban Area Thoroughfare Plan;
- review the next steps in the planning process; and
- provide an opportunity for public comments.

The major focus of the study was to evaluate the need for additional future freeway connections in Western Guilford County. The study findings demonstrate the need for a rerouted I-73, an I-40/I-40 Business Airport Connector, a Forsyth Airport Connector, and a Sandy Ridge Road Connector. The study recommends the addition of generalized corridor locations to the Greensboro Urban Area Thoroughfare Plan. It also recommends that further study be conducted on environmental impacts, facility need, and future roadway alignments.

This meeting will be hosted by the Piedmont Authority for Regional Transportation (PART), NCDOT, Guilford County Planning, Piedmont Triad International Airport, and the Greensboro, High Point and Winston-Salem Metropolitan Planning Organizations.

The public meeting will open a 30 day public review and comment period on the Airport Area Transportation Study and the proposed Greensboro Urban Area Thoroughfare Plan Amendments. Materials for both items will and made available for public review at selected locations throughout the region. For more information about the meeting or the Study, go to www.partnc.org or call PART at (336) 662-0002. For more information about the Thoroughfare Plan Amendments, see www.ci.greensboro.nc.us/gdot/thoroughfareplan/amendments or call (336) 373-2332.

Directions to the Meeting Location

From I-40 take the Hwy. 68 exit and travel north. Exit toward the airport onto Bryan Blvd. Turn left at first traffic light onto Regional Rd. Turn right onto Business Park Drive and the Piedmont Triad Partnership Office is on the left.